EFFECTS OF A DISABILITIES AWARENESS WORKSHOP: EMPLOYEES' KNOWLEDGE, ATTITUDE, AND INTERACTION

BY

ELIZABETH LOUISE WIKFORS

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

1996

Copyright 1996

by

Elizabeth Louise Wikfors

ACKNOWLEDGMENTS

This work is dedicated to my family and friends who have supported me over the years as I have continued to pursue more education. My mother and father have always stressed the importance of education stating, "you will appreciate it more if you do it on your own." My friends, Michael Ziomek and Kathy Godfrey, have been a terrific support and sounding board for me over the years, and I mean years. I thank them for going through the joys and tears of two degrees, they belong to them as much as they do to me. And finally, Rich, my new husband, has helped me overcome some hurdles through his encouragement, love, and support over the last year. My family and friends have been my inspiration and support--for this I am thankful and blessed.

I would like to thank my doctoral committee at the University of Florida: Dr. Schwartz, my chair, for his belief in me and constant encouragement; Dr. Webb for encouragement, support, and mentorship; Dr. Mercer for humor and smiles; Dr. Miller for teaching me more about statistics and helping me to understand the whole process; Dr. Jones for reliving the doctoral experience with me and for kind words; and to Dr. Repetto, for teaching me perseverance. All of them have been an example to me and have taught me the true meaning of being a professional.

I am also grateful to Michele Kinser, the employees, and management of Busch Gardens, Tampa Bay. My experiences in the park and their desire to make Busch

Gardens better and more accessible for individuals with disabilities have inspired this dissertation. I thank them for their willingness to participate in this study and their desire to learn more on how to interact with individuals with disabilities.

TABLE OF CONTENTS

page

ACKNOWLEDGMENTS . . . iii

LIST OF TABLES . . . vii

ABSTRACT . . . ix

CHAPTERS

1 INTRODUCTION TO THE PROBLEM . . . 1

Statement of the Problem . . . 5
Primary Research Questions . . . 7
Statement of the Purpose or Rationale . . . 7
Definition of Terms . . . 9
Delimitations of the Study . . . 10
Limitations of the Study . . . 11
Summary . . . 11

2 REVIEW OF THE LITERATURE . . . 13

Introduction . . . 13
Selection of Relevant Literature . . . 14
Historical Aspects . . . 16
The Americans with Disabilities Act . . . 20
Social Recreation and Leisure . . . 29
Theme Parks and Education & Business Perspectives in Training . . . 34
Adult Learning Issues . . . 52
Training Models . . . 55
Knowledge About Persons with Disabilities . . . 61
Attitude Toward Persons with Disabilities . . . 64
Interactions with Persons with Disabilities . . . 80
Conclusion . . . 88

3 METHODS AND PROCEDURES 90

Introduction 90
Description of Null Hypothesis 90
Description of the Subjects 91
Description of the Research Instrumentation 92
Description of the Procedures 94
Treatment of the Data 97
Summary 99

4 RESULTS 100

Summary of Demographic Information 100
Knowledge 102
Research Question 1 103
Attitude 105
Research Question 2 106
Interaction 108
Research Question 3 110
Summary 116

5 DISCUSSION AND IMPLICATIONS 118

Review of Study Purpose and Objectives 118
Review of the Literature 119
Review of the Hypotheses 120
Review of the Methods 121
Review of the Experimental Questions 123
Discussion and Implications 124
Discussion of Problems and Limitations 128
Suggestions for Further Research 129
Summary 132

APPENDIX DISABILITY AWARENESS WORKSHOP SCHEDULE 134

REFERENCES 137

BIOGRAPHICAL SKETCH 146

LIST OF TABLES

Table page

2-1 Effective Dates of the ADA Title I-V 25

3-1 Schematic Representation of this Experimental Design 95

4-1 Demographics of Final Sample: Data Reported is Actual Subjects by Group 101

4-2 Demographics of Final Sample: Age by Group 101

4-3 Mean Score of Knowledge (FAD) by Gender and Group 102

4-4 Means, Standard Deviation, and Change Scores for the FAD for Treatment and Control Groups 104

4-5 Results of Analysis of Covariance for Employees Knowledge of Issues Related to People with Disabilities 104

4-6 Mean Score of Attitude by Gender and Group 106

4-7 Mean Scores of Attitudes (IDP) for Study Participants by Group 107

4-8 Results of Analysis of Covariance for Employees Attitude With People with Disabilities 107

4-9 Mean Scores of Interaction by Gender and Group 109

4-10 Number of Words Spoken--Results of Analysis of Variance for Employees' Interaction with People with Disabilities 111

4-11 Number of Locator Words Used-- Results of Analysis of Variance for Employees' Interaction with People with Disabilities 113

4-12 Number of Interrogatives Used--Results of Analysis of Variance for Employees' Interaction with People with Disabilities 113

4-13 Mean Scores by Group on Interrogatives 113

4-14 Distance from Question to Jeepers Creepers--results of Analysis of Variance for Employees' Interaction with People with Disabilities 114

4-15 Map Used to Give Directions--Results of Analysis of Variance for Employees' Interaction with People with Disabilities 115

4-16 Knew Location of Jeepers Creepers Results of Analysis of Variance for Employees' Interaction with People with Disabilities 116

Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

EFFECTS OF A DISABILITY AWARENESS WORKSHOP: EMPLOYEES' KNOWLEDGE, ATTITUDE, AND INTERACTION

By

Elizabeth Louise Wikfors

December 1996

Chairperson: Dr. Stuart E. Schwartz
Major Department: Special Education

The purpose of this study was to investigate the effectiveness of a disability awareness workshop and its effect on theme park employees. Three research questions were posed: (a) would employees who received a disability awareness workshop demonstrate a greater knowledge base in disability issues and legislation; (b) would employees who received a disability awareness workshop alter their attitude toward persons with disabilities; and (c) would attending a disability awareness workshop change employees' interaction pattern toward guests with disabilities.

The 40 employees participating in this study were given the Facts on Disabilities (FAD) Scale and the Interaction with Disabled Persons (IDP) as a pretest. Employees were randomly selected to be in either the treatment or control group. Employees in the treatment group received a one day disability awareness workshop. Following the workshop, all employees were given the FAD and the IDP as a posttest. Within two weeks following the disability awareness workshop, all employees were observed interacting with guests with and without a disability. The observations were based on Gouvier, Coon, Todd, and Fuller's Verbal Interactions with Individuals Presenting With and Without Physical Disability's Scale.

A repeated measures ANCOVA was conducted to analyze the employees growth in knowledge and its effect on attitude. The analysis revealed statistically significant differences in the knowledge level of employees and a more positive attitude toward guests with a disability as a result of attending the disability awareness workshop.

An ANOVA was conducted to determine the change in interaction pattern of theme park employees toward guests with and without disabilities. Each employee was observed interacting with and without a guest with a disability within two weeks of the conclusion of the disability awareness workshop. Observations were recorded, transcribed, and analyzed. The analysis revealed statistically significant differences in the frequency of interrogatives used when examining the interaction pattern of employees toward guests with and without disabilities.

The results of this investigation may contribute to increase theme park employees' awareness of disability issues and legislation regarding persons with disabilities. Conclusions and recommendations for further research are provided.

CHAPTER 1
INTRODUCTION TO THE PROBLEM

Although individuals with disabilities have been a part of society for thousands of years, they still struggle for full integration in society. In 1993, the Bureau of Labor and Statistics estimated that 43 million individuals have an identified disability. This is roughly 21% of the United States' population. Individuals with disabilities are not only found in schools but they are in the workforce and throughout society.

Legislation such as the Rehabilitation Act of 1973 (P.L. 93-112), the Americans with Disabilities Act of 1990 (ADA) (P.L. 101-336), and the Individuals with Disabilities Education Act (P.L. 101-476) have impacted the number of persons actively pursuing a multifaceted lifestyle (e.g., social, recreation and leisure, and employment). These federal mandates directly affect the services that are or should be available to all individuals with disabilities.

In general, we live in a world of renewed optimism regarding individuals with disabilities, their potential, and our ability to offer them a better life than one they may have had in an institutional setting. There is no doubt that the current trends in education (e.g., the Individuals with Disabilities Education Act) and legislation (e.g., the Americans with Disabilities Act and the School to Work Opportunities Act) have already meant a better life for many people. The past history of the treatment of individuals with disabilities only helps us to see the enlightened aspects of the future. When looking at past trends, the lack of knowledge and experience is evident. This is made clear when we look at the

“Wild Boy of Aveyron.” The work done with this boy is said to be the beginning of special education (Kauffman & Hallahan, 1981). The changes that were taking place in attitudes toward individuals with intellectual difficulties were intertwined with the changes occurring in the care and treatment of individuals with mental illness. Motivated largely by humanitarianism the movement of individuals to a more humanitarian, setting emphasized the relationship between the doctor and the person.

The parallel to today’s scenario is obvious. The emphasis on education and training is noticeable. The attitude that all or most of the problems encountered can be solved with an adequately devised training method is noticeable. The realism is that while we may spend hours training two or three people, there are ten waiting to be trained. Although attempts have been made to change attitudes toward individuals with disabilities, businesses were not involved in this process until the early 1990s.

Beginning in the early 1990s, disability awareness trainings have been used by private industries to educate their employees on the ADA and persons with disabilities. A number of United States’ companies are providing disability awareness training programs as more managers realize the practical benefits that can be gained from improved etiquette and attitudes at the workplace (McGarvey & Smith, 1993). These benefits include better customer service, higher customer retention, higher revenue from satisfied customers, and reduced stress and disharmony among employees. Areas in which disability awareness workshops can be used to avoid potentially damaging situations are telephone service and interpersonal relations with members of minority groups and persons with disabilities.

Disability awareness training programs provide employers with a proven means to help break down attitudinal barriers that are often the biggest obstacles to the integration and acceptance of persons with disabilities (Matthes, 1992). Disability awareness training workshops operate on the assumption that employees are more likely to improve their interaction toward persons with disabilities if employees can appreciate and understand the difficulties individuals encounter because of their disabilities. Matthes (1992) found that disability awareness training requires participating employees complete exercises that simulate various conditions that persons with disabilities experience.

Most disability awareness training programs are done as workshops. Trainers typically keep their programs short, with workshops lasting no more that one day. Trainers or facilitators can use experimental exercises or simulations along with technology to break down fears and prejudices that workers without disabilities might have toward persons with disabilities. The workshop focus is usually kept strictly on specific areas where customer assistance is needed. McGarvey & Smith (1993) noted that employees tend to be reluctant to participate in such disability awareness training because of the fear factor. Employees were fearful of interacting with individuals with disabilities because the employees did not want to offend the individual.

The ADA prohibits discrimination against persons with physical or mental disabilities. The ADA applies to public service, public and private transportation, telecommunication services, and employment. Killion (1994) suggested that the common threats to employers include economics, inconvenience, threats to working relationships, and fear of the unknown.

Employee disability awareness training, therefore, is receiving increased attention as companies try to educate all employees on disability awareness in order to increase the company's profits. If a customer is pleased with the service provided by a company, the customer will return as well as tell other friends about the service received. Employers must ensure that all employees can interact comfortably and productively with persons with disabilities. By doing this, employees are able to see persons with disabilities as people first rather than the disability first.

Not every person with a disability is covered by the ADA. Certain standards must be met for a person to qualify for the ADA's protections. To be considered disabled under the ADA, a person must have a condition that impairs a major life activity or a history of such a condition, or be regarded as having such a condition. Individuals with disabilities must also be qualified for the job, program, or activity to which they seek access. To be qualified under the ADA, a person with a disability must be able to perform the essential functions of a job or meet the essential eligibility requirements of the program or benefit, with or without an accommodation for the disabling condition.

Much of the language of the ADA is taken from existing federal civil rights laws and court decisions. Definitions of terms such as employee, employer, and commerce are taken from Title VII of the Civil Rights Act. Other terms, such as reasonable accommodation, qualified individual with a disability, essential function, and undue hardship come directly from Section 504 of the Rehabilitation Act of 1973, which prohibits federal fund recipients from discriminating on the basis of disability in their programs and activities.

The ADA prohibits discrimination in all employment practices, including job application procedures, hiring, firing, advancement, compensation, training, and other terms, conditions, and privileges of employment. It applies to recruitment, advertising, tenure, layoff, leave, fringe benefits, and all other employment-related activities.

Employment discrimination is prohibited against qualified individuals with disabilities. This includes both applicants for employment and employees. An individual is considered to have a disability if he or she has a physical or mental impairment that substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment. Individuals discriminated against because they have a known association or relationship with a person having a disability are also protected.

Proactive planning by employers can serve as evidence of an employer's initiative to comply with the ADA. The planning efforts of employers include reasonable accommodations policy, disability awareness training, and evaluation of training and testing materials for potential bias is crucial for disability acceptance. Currently employers are either required or encouraged to provide training to their employees regarding adaptations and accommodations for individuals with disabilities (Wyatt, 1993). It is the top level management or managers, however, who are receiving the disability awareness training and the ADA training, not the employees who have direct contact with customers with disabilities.

Statement of the Problem

Including individuals with disabilities in community recreation programs, including theme parks, has recently become more popular (Galambos, 1994). The ADA stresses the need for true inclusion, where individuals with disabilities can actively participate and interact in programs in a meaningful way. The ADA requires that public accommodations such as hotels, restaurants, theaters, laundromats, museums, parks, day care centers, and private schools may not discriminate against individuals with disabilities (ADA, 1990).

Donaldson (1990) contended that it is important to eliminate the negative attitudes, behaviors, stereotypes, and discriminatory behavior toward individuals with disabilities. Many individuals with disabilities believe that the greatest barrier to full participation in society are not their disabilities or inaccessibility to buildings, rather the biased attitudes and treatment of people without disabilities.

The problem to be investigated in this study was the effectiveness of a disability awareness training program for employees who have actual contact with individuals with disabilities. Specifically, the one fundamental question was: Did the use of a disability awareness training program for employees positively affect employees' knowledge of persons with disabilities and subsequently did this knowledge affect the way the employee interacts with persons with disabilities and their attitude toward individuals with disabilities. This study reflected the following objectives:

1. To implement and assess the effectiveness of a disability awareness training in developing a greater knowledge base of individuals with disabilities.

2. To determine if after attending the disability awareness workshop the level of knowledge will change the manner of employees' attitudes toward individuals with disabilities.

3. To determine the level of change in knowledge and interaction pattern of employees toward individuals with disabilities as a result of the disability awareness training.

The effect of disability awareness training aimed to enhance employees' awareness of issues associated with living with a disability and promoted realistic attitudes toward a disability. It was important to investigate this for many reasons. First, this study provided data bases on levels of employee awareness and interaction of individuals with disabilities. Second, this study provided initial research in investigating employee involvement with individuals with disabilities. Third, this study was unique in addressing employee interactions with guests or customers with disabilities in a variety of settings (e.g., social recreation and leisure and service).

Primary Research Questions

The investigator (a) implemented and assessed the effectiveness of an employee disability awareness workshop for employees on disability issues and interaction patterns with persons with disabilities, (b) used a pretest-post to measure employee knowledge concerning disability awareness and legislation, and interaction level, and (c) conducted observations to determine attitudes of employees toward guests with disabilities. Through those activities, the following questions were addressed:

1. Would employees in the treatment group demonstrate a greater knowledge base in disability issues and legislation after attending a professionally designed workshop than employees in a control group?

2. Would employees change their attitudes regarding persons with disabilities as a result of attending a workshop on individuals with disabilities and disability legislation?

3. Would an employee training workshop on disability awareness issues and legislation change the employees' interactions with individuals with disabilities?

Statement of the Purpose or Rationale

Legislation such as the Rehabilitation Act of 1973 and the Americans with Disabilities Act have an impact on the number of individuals actually pursuing a multifaceted lifestyle. These federal mandates directly affect the services that are available to individuals with disabilities. Rothwell (1990) discussed how companies can prepare for changes mandated by ADA, changes that prohibit discrimination to individuals with disabilities. These changes included (a) learn about the ADA, (b) find out what similar organizations are doing with regard to employee knowledge of persons with disabilities, (c) identify those persons affected by the ADA, and (d) develop a plan to assist with compliance.

Employees may have direct contact with individuals with disabilities. Therefore, the employees need to be aware of the strengths, skills, and positive attributes that individuals with disabilities have (Fabian, Luecking, & Tilson, 1994) and can offer to others. When employees are given examples of basic knowledge of individuals with disabilities they can see that all persons have varying abilities and talents.

Kidd (1973) stated that people of all kinds, in all places, and of all ages have the marvelous capacity to learn, grow, and enlarge. Understanding learning in adulthood is as if piecing together a puzzle--there are many parts that must fit together before a total picture emerges. The individual learner and the context in which the learning takes place are key pieces of the puzzle. A third piece is the learning process.

Kidd (1973) discussed the minimal differences between andragogy (education of adults) and pedagogy (education of children). The biggest differences include the emerging role of technology (video and computer) presentations, large scale organized and administered workshops, simulations, and self-directed learning experiences. The adult learning theories include how to teach adults, methods of teaching, helping adults to increase their learning skills, and learning materials.

The most effective method of adult learning is a workshop with technology and simulations (Cranton, 1992; Davis & McCullen, 1990; Dickinson, 1973; Knowles 1990). The workshop should stress practical volume (Poppino, 1983), guided- and self-directed learning (Dickinson, 1973; Knowles 1990), and involve mentoring or peer coaching (Daloz, 1986; Showers, 1990). The best methods of teaching include face-to-face interaction (Morgan, Holmes, & Bundy, 1976). Helping adults increase their learning skills is the role of the trainer and this role is vital (Hayes, 1989). Rosenblum (1985) explained that the most significant learning occurs when adult students and their instructors (trainers) discuss the learning process, its goals, objectives and outcomes, and together participate in carrying out these goals and objectives.

Definition of Terms

Americans with Disabilities Act's central purpose is to extend to individuals with disabilities civil rights protections similar to those provided to individuals on the basis of race, sex, national origin, and religion. These protections expressly forbid discrimination against persons with disabilities in the areas of employment, transportation, public service, public accommodations, and telecommunication services.

Customers, for the purpose of this study, refers to people who pay for goods or services.

Disability refers to the reduced function or loss of a particular body part or organ; the term impairment is often used synonymously. A disability limits the person's ability to perform certain tasks in the same way as most nondisabled persons do.

Guest, for the purpose of this study, refers to people who visit theme or entertainment parks.

Handicap, for the purpose of this study, refers to the problems a person with a disability or impairment encounters in interacting with the environment. The ADA defines handicap as

> mentally retarded, hard of hearing, deaf, orthopedically impaired, other health impaired, speech and language impaired, visually handicapped, seriously emotionally disturbed, or children with specific leaning disabilities who, by reason thereof, are required special education or related services. (20 U.S.C. 1401 [a][1])

Interaction refers to the mutual or reciprocal action or influence.

Knowledge refers to the fact of knowing something with familiarity gained through experience or association.

Simulation refers to the imitative representation of the functioning of one system or process.

The Rehabilitation Act of 1973 is a civil rights mandate for individuals with disabilities. It prohibits discrimination against persons with disabilities in any program or activity that receives financial assistance from the U.S. Government.

Training refers to the act, process, or method that one trains. Also the skill, knowledge or experience that one acquired by one that trains.

Workshop refers to a brief, intensive education program for a relatively small group of people that focuses on techniques and skills in a particular field.

Delimitations of the Study

The scope of this study was delimited in several ways. First, the study was delimited by one employment setting. Therefore, results of this study should not be generalized to employment settings other than the setting used in this study. Second, the subjects in this study were chosen from employees who have actual contact with persons with disabilities. Third, no differentiation was made among the varying disabilities. Finally, no differentiation was made between employees who may have received previous disability training and those who had not, when random assignment to treatment and control group was done.

Limitations of the Study

Employee involvement in training programs that may have been previously offered by employers as well as any informal gathering from professionals involved with individuals with disabilities may result in varying degrees of knowledge and levels of interaction.

Summary

The importance of employee knowledge of individuals with disabilities has been increasingly recognized in the legislation yet sparsely recognized in the literature. As employers are trying to get positive results out of their employee trainings and at the same time increasing their profits, employers are recognizing the practical benefits of employee training in crucial areas, such as disability awareness training.

When employers are given examples of basic knowledge of individuals with disabilities, they can see that all persons have varying abilities and talents. Ways to enhance employee knowledge are to (a) address the person first then the disability (e.g., person with mental retardation), (b) emphasize abilities, not limitations, (c) not label people as part of a disability group; do not say “the disabled” say “persons with disabilities,” (d) not give excessive praise or attention to a person with a disability; do not patronize them, (e) emphasize the importance of choice and independence; let the person do and speak for him or herself as much as possible, and (f) explain that disability is a functional limitation that interferes with a person's ability to walk, hear, talk, learn, etc.; use handicap to describe the situation or barrier imposed by society, the environment, or oneself.

In Chapter 2, a review of the research and related literature is presented. Chapter 3 includes the null hypothesis, method, and procedures of the study, and treatment of the data. The results of the study are presented in chapter 4. Discussion, conclusion, and implications or employee training and future research compose the fifth and final chapter.

CHAPTER 2
REVIEW OF THE LITERATURE

There are 48 million Americans with disabilities, making them members of the largest minority group in the United States. The Americans with Disabilities Act (ADA) and other civil rights legislation have granted persons with disabilities the legal right to equal opportunity in education, employment, housing, transportation, and other community services. However, in spite of these legal provisions, 50% to 75% of adults with disabilities are unemployed or underemployed (U.S. Commission on Civil Rights, 1983) and 59% are lonely or have unmet social needs (Kuh, Lawrence, Tripp, & Creber, 1988). Those with more severe disabilities experience greater isolation from the mainstream of society.

This study was conducted to determine the effectiveness of a professionally designed disability awareness program to increase employee awareness of individuals with disabilities. An area of importance was to determine the level of knowledge and interactions of employees with guests with disabilities. Furthermore, to determine if increased employee knowledge will result in a change of interaction with and attitude towards guests with disabilities.

Introduction

The review of the literature in this chapter is divided into eight major sections. Section one contains a review of the historic aspects of the level of knowledge of people with disabilities, the interaction patterns of people with disabilities, and attitudes toward people with disabilities. Section two contains an explanation and definition of Public Law 101-336, The Americans with Disabilities Act (ADA) of 1990. Section two contains descriptions of several changes in the workforce and in the community because of the ADA as well as the effects of these changes. Section three contains a review of the social recreation and leisure literature pertaining to people with disabilities. Section three focuses on the need to fully include people with disabilities in all aspect of social recreation and leisure, leisure involvement, and community integration as well as leisure related programs that are designed for people with disabilities. Section four contains a review of literature combining theme parks and their part in the education process and business perspective on employee training. The next section contains a review of literature pertaining to adult learning issues. In section six, the literature regarding knowledge of people with disabilities is examined. Included in this section are (a) the need for people first language and (b) quality of life for people with disabilities. In section seven, the literature regarding attitudes toward people with disabilities is examined. Included in the next section are (a) attitudes of employees, (b) attitudes toward employability, and (c) attitudes toward the community. The final section contains a review of literature pertaining to the interaction styles toward people with disabilities.

Selection of Relevant Literature

The initial step in this review was to determine the criteria for inclusion of references. All relevant studies completed in the last ten years (1985-1995) were examined. In addition, any notable research cited in the literature earlier than the 10-year period was also considered.

Professional literature concerning employee knowledge, attitude, and interaction toward persons with disabilities had to meet the following criteria to be included in the review:

1. The subjects and settings had to be thoroughly described.

2. The treatment conditions and experimental procedures must have been detailed enough to permit replication.

3. The experimental design and data analysis procedures had to be presented without significant loss of information.

4. The experimenter's interpretations had to be consistent with the results displayed.

Sources of literature review included Current Index to Journals in Education (CIJE), Dissertation Abstracts International, Information Clearinghouse (ERIC), and Psychological Abstracts. References initially selected were located through the library at the University of Florida, through the interlibrary loan system, or through other professionals in the field. Descriptors in this literature search included disabilities, attitudes toward persons with disabilities, interactions with persons with disabilities, knowledge of persons with disabilities, employee attitudes, employee interaction, employer attitudes, employer interaction, the Americans with Disabilities Act, the Individuals with Disabilities Education Act, theme parks, entertainment, social recreation and leisure, and quality of life.

The initial references were scrutinized and those describing empirical research were chosen based on the investigator's judgment of a clear description of subject selection, methodology, and results. Professional literature other than empirical research were also included if, in the author's judgment, the information provided valuable contributions about theme park employees' knowledge, attitude, and interaction toward guests (persons) with disabilities.

Historical Aspects

Knowledge of People with Disabilities

There have always been people with disabilities, but there have not always been special education services to address their needs. During the closing years of the eighteenth century, following the American and French revolutions, effective procedures were devised for teaching children with sensory impairments (Winzer, 1986). Early in the nineteenth century, the first systematic attempts were made to educate "idiotic" and "insane" children--those who today are said to have mental retardation and emotional or behavioral disorders. In the pre-Revolutionary era, the most society had to offer people with a disability was protection--asylum from a cruel world into which they did not fit and in which they could not survive with dignity, if they could survive at all (Murray, 1988). But as the ideas of democracy, individual freedom, and egalitarianism swept through America and France, there was a change in attitude. Political reformers and leaders in medicine and education began to champion the cause of individuals with disabilities, urging that these "imperfect" or "incomplete" individuals be taught skills that would allow them to become independent and productive citizens. These humanitarian sentiments went beyond a desire to protect and defend individuals with disabilities. The early leaders sought to normalize exceptional individuals to the greatest extent possible and confer upon them the human dignity they presumably lacked (Sheer & Groce, 1988).

Attitudes toward People with Disabilities

Over the past ten years, a great change has taken place in the public's perception of the ability of people with disabilities to live and work in the community. This is due partly to two key pieces of legislation that were passed in 1990, the Individuals with Disabilities Education Act (IDEA) and the Americans with Disabilities Act (ADA). The IDEA ensures that all children and youth with disabilities have the right to a free and appropriate public education. The ADA ensures the right of all individuals with disabilities to nondiscriminatory treatment in other aspects of their lives. It provides protection of civil rights in the specific areas of employment, transportation, public accommodations, state and local government, and telecommunications.

This new perception has led to a systematic change in the service delivery network, and a re-orientation of public policy. Instead of lifelong dependency, the outcomes society now seeks are self-sufficiency, productivity, and independent living (Elder, 1988). Educators have learned that individuals with severe disabilities can work in competitive or supported jobs in integrated employment--that is, alongside workers without disabilities. They need not be relegated to sheltered workshops or day activity centers as in years past. This has the enormous advantage of greatly increasing the individual's earning potential and quality of life in the community. Our changing understanding of what individuals with severe disabilities can accomplish has led to demands that public programs be reoriented to assist them to achieve predetermined goals and objectives.

Makas (1988) indicated that persons with disabilities believe the greatest barrier to full participation in society is not their disabilities or inaccessible buildings but rather biased attitudes and treatment of nondisabled persons. Many persons with disabilities are without friends because others view them with their differences, instead of the interests and needs they have in common with many nondisabled persons.

Correcting these negative views is essential if persons with disabilities are to have an equal opportunity to participate in all facets of society. Biklen, Corrigan, and Quick (1989), Murray-Seegert, (1989), and Peck, Donaldson, and Pezzoli (1990) have shown that nondisabled persons who interact with persons with disabilities obtain a better understanding of other people's behavior, accept individual differences, are less fearful of human differences, and have increased appreciation of diversity.

Interaction with Persons with Disabilities

General reviews and discussions of the effects of interaction on attitudes seldom discuss contact with persons with disabilities. The literature relating to rehabilitation and the social psychology of disability describes research results and discusses the attitudinal effects of interaction between persons with and without disabilities. Unfortunately, much of the research has focused on whether contact has an effect, rather than delineating the effects that influence the size and direction of the effect. Yuker, Block, and Younng (1966) concluded that (a) close personal or social contact with individuals with disabilities outside the family context tends to result in positive attitudes, and (b) contact in a medical or rehabilitative setting usually does not result in positive attitudes.

Later reviews (Anthony, 1972; Donaldson, 1980; Haddle, 1974) distinguished between the effects of contact or interaction and the effects of information about disabilities or people with disabilities. These reviews tended to emphasize the need for information along with contact.

The vast majority of literature (Yuker & Hurley, 1987; Gouvier, Coon, Todd, & Fuller, 1994; Fichten & Amsel, 1988; Fichten, Amsel, Bourdon, & Creti, 1987; Fichten, Robillard, Judd, & Amsel, 1989; Fichten, Robillard, Tagalakis, & Amsel, 1991) pertaining to interaction or contact with people with a disability have been conducted in a school or university setting. Other interaction studies that have had similar results have been conducted by (a) Schepis and Reid (1994) who evaluated a program for training staff to interact with clients with disabilities living in a group situation, and (b) Baumgart and Askvig (1992) who examined job related social skills problems and interventions for persons with disabilities, managers, and entry level employees.

Special Education in the Past

Although there have always been exceptional children, youths, and adults, systematic efforts to educate them date back, primarily, to the early 1980s. Most of the pioneers of special education were European and American physicians who developed techniques to educate children who were blind, deaf, mentally retarded, or who had emotional or behavioral problems.

Today, the profession of special education has matured into a profession that is influenced by many disciplines, such as psychology, sociology, vocational rehabilitation, and social work. In addition to the many individuals and professions that have contributed to the development of special education, much of the progress that has been made is due to the efforts of professional and parent organizations. These groups have been influential by providing a forum in which those who live or work with individuals with a disability may receive support, information, or service. Laws have played a major role in the history of special education. One such law passed in 1990 is the Americans with Disabilities Act that seeks to ensure the rights of people with disabilities.

The Americans with Disabilities Act

Public Law 101-336, the Americans with Disabilities Act (ADA), guarantees people with disabilities access to employment, public accommodations, transportation, public services and telecommunications. President George Bush signed the law July 26, 1990. The bill passed the Senate in final form by a 91-6 vote on July 13, 1990, and the House of Representatives by a 377-28 vote on July 12, 1990.

Considered landmark legislation, the ADA provides comprehensive federal civil rights protection for people with disabilities. However, the legislative concepts incorporated into the law are not without precedent. The prototypes for the ADA are the Civil Rights Act of 1964 that prohibits discrimination based on race, color, sex, religion, and national origin in employment, public accommodations, and the provision of state and local government services. Section 504 of the Rehabilitation Act of 1973 prohibits discrimination against people with disabilities by recipients of federal funds.

Barriers to employment, transportation, public accommodations, public services, and telecommunications have imposed staggering economic and social costs on the American society and have undermined our well-intentioned efforts to educate, rehabilitate, and employ people with disabilities. By breaking down these barriers, the ADA enables society to benefit from the skills and talents of people with disabilities, persons with disabilities to gain from their increased purchasing power and ability to use it, and persons with and without disabilities to lead fuller, more productive lives for all Americans.

The ADA is not an affirmative action statute. Instead, it seeks to dispel stereotypes and assumptions about disabilities, and to assure equality of opportunity, full participation, independent living, and economic self-sufficiency for persons with disabilities. To achieve these objectives, the law prohibits covered entities from excluding people from jobs, services, activities, or benefits based on disability. Furthermore, the law provides penalties for discrimination that are financial in nature with legal fees included.

Not every person with a disability is covered by the ADA. Certain standards must be met for a person to qualify for the act's protections. To be considered disabled under the ADA, a person must have a condition that impairs a major life activity or a history of such a condition, or be regarded as having such a condition that impairs a major life activity.

A person with a disability must also be qualified for the job, program, or activity to which they seek access. To be qualified under the ADA, a person with a disability must be able to perform the essential functions of a job or meet the essential eligibility requirements of the program or benefit, with or without an accommodation for the disabling condition.

Much of the language of the ADA is taken from existing federal civil rights laws and court decisions. Definitions of terms such as employee, employer, and commerce are taken from Title VII of the Civil Rights Act. Other terms, such as reasonable accommodation, qualified individual with a disability, essential function, and undue hardship come directly from Section 504 of the Rehabilitation Act of 1973, which prohibits federal fund recipients from discriminating on the basis of disability in their programs and activities.

The ADA prohibits discrimination in all employment practices, including job application procedures, hiring, firing, advancement, compensation, training, and other terms, conditions, and privileges of employment. It applies to recruitment, advertising, tenure, layoff, leave, fringe benefits, and all other employment-related activities.

Employment discrimination is prohibited against "qualified individuals with disabilities." This includes applicants for employment and current employees. An individual is considered to have a "disability" if he or she has a physical or mental impairment that substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment. Persons discriminated against because they have a known association or relationship with a person having a disability are also protected.

The first part of the definition makes it clear that the ADA applies to persons who have impairments and that these must substantially limit major life activities such as seeing, hearing, speaking, walking, breathing, performing manual tasks, learning, caring for oneself, and working. An individual with epilepsy, paralysis, HIV infection, AIDS, a substantial hearing or visual impairment, mental retardation, or a specific learning disability is covered, but an individual with a minor, nonchronic condition of short duration such as a sprain, broken limb, or the flu generally would not be covered.

The second part of the definition protects individuals with a record of a disability. This part would cover, for example, a person who has recovered from a mental illness.

The third part of the definition protects individuals who are regarded as having a substantially limiting impairment, even though they may not have or perceive themselves to have such an impairment. For example, this provision would protect a qualified individual with a severe facial disfigurement from being denied employment because an employer feared the "negative reactions" of customers or co-workers.

Reasonable accommodation is any modification or adjustment to a job or work environment that will enable a qualified applicant or employee with a disability to participate in the application process or to perform essential job functions. Reasonable accommodations include adjustments to assure that a qualified person with a disability has rights and privileges in employment equal to those of employees without disabilities.

Examples of reasonable accommodation include (a) making existing facilities used by employees readily accessible to and usable by a person with a disability; (b) restructuring a job; (c) modifying work schedules; (d) acquiring or modifying equipment; (e) providing qualified readers or interpreters; or (f) appropriately modifying examinations, trainings, or other programs. Reasonable accommodation also may include reassigning a current employee to a vacant position for which the individual is qualified, if the person is unable to do the original job because of a disability even with an accommodation. However, there is no obligation to find a position for an applicant who is not qualified for the position sought. Employers are not required to lower quality or quantity standards as an accommodation, nor are they obligated to provide personal use items such as glasses or hearing aids.

An employer is only required to accommodate a "known" disability of a qualified applicant or employee. The requirement generally will be triggered by a request from a person with a disability, who frequently will be able to suggest an appropriate accommodation. Accommodations must be made on an individual basis, because the nature and extent of a disabling condition and the requirement of a job will vary in each case. If the individual does not request an accommodation, the employer is not obligated to provide one except where an individual knows the disability impairs his or her ability to know of, or effectively communicate a need for, an accommodation that is obvious to the employer. If a person with a disability requests, but cannot suggest, an appropriate accommodation, the employer and the individual should work together to identify one.

The ADA prohibits discrimination based on relationship or association in order to protect individuals from actions based on unfounded assumptions that their relationship to a person with a disability would affect their job performance, and from actions caused by bias or misinformation concerning certain disabilities. For example, this provision would protect a person whose spouse has a disability from being denied employment because of an employer's unfounded assumption that the applicant would use excessive leave to care for the spouse. It would also protect an individual who does volunteer work for people with AIDS from a discriminatory employment action motivated by that relationship or association.

The ADA has five titles, which cover employment, public services and transportation, public accommodations, telecommunications, and miscellaneous provisions. The various sections of the act became effective at different times as seen on Table 2-1. An overview of the separate provisions follows.

Overview of ADA Titles

Employment (Title I). The ADA prohibits employers with 15 or more employees from discriminating against qualified job applicants and workers who are disabled. The law covers all aspects of employment, including the application process and hiring, on the job training, advancement and wages, benefits, and employer-sponsored social activities.

Table 2-1. Effective Dates of the ADA Title I-V

Title	Effective Date	Responsibility Agency	Regulations Issued
I Employment	25 or more employees 7-26-1992 15 or more employees 7-26-1994	Equal Employment Opportunities Commission	July 26,1991 (28 C.F.R. Part 130)
II Public Services	January 26,1992	Justice Department	July 26,1991 (28 C.F.R. Part 35)
Public Transportation	Newly acquired vehicles August 26,1990	Transportation Department	September 6, 1991
	Paratransit January 26,1992	Transportation Department	(49 C.F.R. Parts 37 and 38)
III Public Accommodations	January 26, 1992	Justice Department	July 26, 1991 (28 C.F.R. Part 36)
Private Transportation	Newly acquired vehicles August 26,1990	Transportation Department	September 6, 1991 (49 C.F.R. Parts 37 and 38)
Over the Road Buses	July 26 1996	Transportation Department	September 6, 1991
IV Tele-communications	Telecommunication providers must be in compliance by July 26, 1993	Federal Communications Commission	August 1, 1991 (47 C.F.R. Parts 0 and 64)

A qualified person is someone who, with or without a reasonable accommodation, can perform the essential functions of the job in question. An employer must provide reasonable accommodations for the worker with a disability, unless that would impose an undue hardship on the employer.

Public Services and Transportation (Title II). Title II of the ADA prohibits state and local governments from discriminating against persons with a disability in their programs and activities. The law requires all bus and rail transportation to be accessible to passengers with disabilities. Air transportation is not covered by the ADA. New public busses and new train cars in commuter, subway, intercity and light rail systems must be accessible to riders with a disability. All new stations and facilities and key subway and light rail stations must be made accessible. Where fixed-route and rail bus service is offered, a public transit agency must offer paratransit service.

Public Accommodations (Title III). The ADA prohibits privately operated public accommodations from denying goods, programs, and services to people based on their disabilities. Covered businesses must accommodate persons with a disability by changing policies and practices, providing auxiliary aids, and improving physical accessibility, unless that would impose an undue burden.

New and renovated commercial buildings must be accessible. Existing public transportation must remove architectural and communication barriers where such removal is readily achievable. Title III also requires providers of private transportation services, such as private bus lines and hotel vans, to make their vehicles and facilities accessible.

Telecommunication (Title IV). Title IV of the ADA requires telephone companies to provide continuous voice transmission relay services that allow persons with speech and hearing impairments to communicate over the telephone through telecommunication devices for the deaf. In addition, Title IV requires that federally funded television public service messages be closed captioned for the viewers with hearing impairments.

Other Provisions (Title V). Miscellaneous provisions in Title V require: The Access Board to issue accessibility standards, attorneys' fees to be awarded to prevailing parties in suits filed under the ADA, and federal agencies to provide technical assistance. Title V states specifically that illegal use of drugs is not covered under the act. It also provides that states are not immune from suits filed under the ADA and that federal, state, and local laws that provide equal or greater protection to persons with disabilities are not superseded or limited by the ADA.

Changes in the Workforce

Proactive planning can serve as evidence of employers' efforts to comply with the ADA. Planning efforts include appropriately written job descriptions, reasonable accommodation policies, disability awareness training, and testing materials for any possible bias.

The intent of the ADA is nothing less than to integrate every American with a disability or impairment into the mainstream of society. The act attempts to do so by prohibiting any company or business from discriminating against individuals with disabilities in employment and in access to public accommodations and services.

Private corporations are still implementing changes as mandated by the ADA. Rothwell (1991) outlined four steps which private corporations are currently following. The steps are (a) learn about the ADA, (b) find out what similar organizations are doing, (c) identify affected employees, and (d) develop a plan to assist with compliance.

Mello (1995) identified ways public sector managers ensure compliance with the ADA. They are (a) have clear, specific job descriptions, (b) use consistent selection and testing processes, (c) utilize participative management techniques, and (d) give attention to coworker attitudes toward employees with disabilities.

Impact on the Community

The ADA lists twelve categories of public accommodations as shown below. Within each category, a representative sample of those types of entities covered is listed. The twelve categories are

- places of lodging (inn, hotel, motel);
- establishments serving food or drinks (restaurant, bar);
- places of exhibition or entertainment (movie house, theater, concert hall);
- places of public gathering (auditorium, convention center);
- establishments selling or renting items (bakeries, clothing stores, shopping centers);
- establishments of providing services (laundromats, travel services, insurance offices);
- stations used for public transportation (airports, terminals, depots, but not including rail and bus stations that are covered under Title II);
- places of public display or collection (libraries, museums);
- places of recreation (parks, zoos, amusement parks);
- places of education (schools of all levels);
- establishments providing social services (day-care and senior citizen centers, homeless shelters, food banks); and

- places of exercise or recreation (gyms, bowling alleys, golf courses).

Social Recreation and Leisure

Including individuals with disabilities into the community recreation programs has become more popular recently (Galambos, 1994). The ADA stresses the need for true inclusion where individuals with disabilities can actively participate and interact in programs in a meaningful way. Family recreation programming is being restructured because of changing family structures. McCormick (1991) outlined how individuals still consider family recreation experiences extremely important. Substituting the word community for family in promoting special events may attract more people as traditional families decline.

Inclusion, partnerships, and transitional services are not fads or catchy buzzwords; they are the trends of the 1990s. Specialized programs, those planned specifically for individuals with disabilities, will continue to fulfill the recreation needs for may people, there is a growing demand from many others for inclusive recreation opportunities. Inclusion is a concept that implies participation of all individuals in activities, facilities, and resources without restriction.

Much of the literature on social recreation and leisure activities pertains to older adults (i.e., age 50 or older); however, there is emerging research on adolescent leisure activity. Caldwell (1993) stated that much of the adolescent leisure activity research has focused on typical activities engaged in by adolescents. Caldwell went on to state that socializing appeared to be the most common adolescent leisure activity and television watching was second in popularity. With the rise of VCRs, many adolescents are using video watching as a reason for socializing. Caldwell found that adolescent leisure behavior could be characterized by two clusters: relaxed leisure and transitional activities.

In the general recreation and leisure literature, there has been a distinct increase in research directed toward understanding the constraints to leisure participation and experience. Hultsman (1992) conducted one of the few studies to examine barriers to participation among youth. She found that ten to fifteen year olds perceived transportation, cost, time activity was offered, peer pressure, and lack of skill to be barriers to participation. In addition, Hultsman found that not liking the leader and not liking the rules were reasons the youths gave to cease participation in leisure activities.

Hultsman (1992) examined the perceptions of constraints to organized recreational activity participation among 940 youths in 5th-8th grades. Hultsman was concerned with the perception of these students concerning why they did not join organized recreation activities that interested them and why these students dropped out of organized recreational activities. Each participant was given a questionnaire that contained 17 items representative of the reasons most often used to describe leisure constraints. Students were asked to agree or disagree with each statement. The results revealed that the subjects perceived activity cost, parents denying permission to join, lack of transportation, and not being old enough to join as the greatest constraints. Other reasons given were loss of interest in the activity, the activity was no longer available, and the activity time was not convenient. Limitations to this study include the instrument used had no reliability and validity information. There was also no control or treatment group used in this study; therefore, the results can not be generalized to other settings.

Dattilo and Jekubovich-Fenton (1995) and Bedini (1993) identified several areas that are necessary for inclusive leisure services to be successful. First, the trend toward inclusive leisure services focuses attention on the participant's strengths as opposed to weaknesses, thus providing all participants with choices of age-appropriate recreation activities that they can participate with their peers. Secondly, self-determination and choice were important elements of leisure and enjoyment. Dattilo and Jekubovich-Fenton noted it was important for participants to make as many choices as possible and take responsibility for their participation. Lastly, Dattilo and Jekubovich-Fenton recommended professionals develop education programs for leisure activities. Leisure education programs are designed to help all participants develop an awareness of leisure opportunities and resources and acquire skills necessary for participation throughout the life span.

Schleien (1993) examined the need for inclusive leisure programs. Schleien investigated existing leisure service programs and determined that efforts should not be spent on programming for predetermined groups of individuals with disabilities but rather on creating a community in which all members are included. The following six steps are integral in including individuals with disabilities in a social recreation or leisure setting within any community:

- Assessing individual leisure preferences and needs.
- Selecting age-appropriate, community leisure activity.
- Determining the environmental constraints and demands of the activity.
- Assessing the skill levels and deficits relative to the identified demands of the activity.

- Developing strategies to overcome individual deficits and program barriers.
- Using cooperative learning situations.

Leisure services for individuals with disabilities are considered to be most beneficial when they are offered in the person's least restrictive environment. People who are functioning within their least restrictive environment have opportunities to participate in the community as much like others as possible. The least restrictive recreation environment can be identified by determining which community facilities are currently being used by peers without disabilities. Patterns and conditions of everyday life that are so as close to the mainstream of society should be made available to people with disabilities. The inclusion of people with disabilities into community recreation programs is essential if the process of normalization is to occur.

Bedini (1993) investigated the implications of an integrated social recreation and leisure program. Bedini examined over 500 professional journal articles and identified four implications. First, community recreation programs should strive to provide opportunities for developing and nurturing friendships and social interactions between people with and without disabilities. Based on Bedini's research it should be noted that recreation staff need to encourage acceptance and interaction among individuals with and without disabilities. Second, duration and education help individuals with disabilities become more comfortable with those with disabilities, thus enhancing the successful transition of individuals with disabilities into integrated social recreation and leisure programs. Third, the benefits of parent involvement in training and integrating their children into community programs is essential. Workshops for parents or caregivers need to address the importance of leisure activities. Lastly, leisure education programs within a community setting should be designed to be implemented over a long period of time.

Many of the studies share a common conceptual underpinning which views leisure as a major contributor to adolescent development. Leisure contexts provide opportunities for adolescents to be producers of their own development. While there is evidence that many leisure experiences are positive and provide a solid foundation for development, not all leisure experiences are positive. Since free time activities comprise between 40-50% of an adolescent's life (Caldwell, 1993), leisure service providers are in a critical position to provide positive experiences and guidance.

Bergin (1992) found leisure activities not only predict in-school achievement, but they may also predict success in later years and work activity. It is important to note that leisure activities are important for the development into adulthood, however more research is needed in this area. As noted in this section, some research suggests adolescents do not always desire a challenge in their leisure. Emphasis may need to be placed on practice skills rather than on development skills (i.e., come and learn a new skill). What is clear in the literature, however, is that challenge, relaxation, and transitional activities will be most successful if they take place in a social context and facilitate interactions with others. Therefore this study is important to examine the interactions between individuals with disabilities and individuals without disabilities in a variety of social and leisure settings. Furthermore, this study will examine the interactions among employees and guests with disabilities to ensure the interactions are done in a relaxed manner.

Theme Parks and Education & Business Perspective in Training

The family vacation is seen as a common leisure experience, with an emphasis on the rise of theme park attendance. Theme parks are designed to enable parents to entertain everyone in the family with minimal frustration in organization and application, provide a single-price, and an inside-the-gate complete experience.

While North America's top 50 amusement parks drew approximately 145.9 million visitors in 1994, attendance climbed 7% at the top North American theme parks: Magic Kingdom, MGM-Disney Studios, Epcot in Orlando, Florida, and Six Flags Great Adventure in Jackson, New Jersey (O'Brien, 1995). Amusement or theme park reached $13 billion in 1995 and are expected to increase as much as 4-5 % through the end of the 1990s (Stanley, 1995). One reason for such growth is the brand-building efforts of a number of amusement park chains.

Education continues to operate as an enclave of elite culture and is battling for interest and respect with the mass media, technology, and the popular arts (King, 1989). These cultures should be brought together. Using the creative ideas generated by theme parks is an effective method of importing popular culture into the schools. Theme parks provide a total learning environment and are highly successful as evidenced by the 50 million plus visitors a year. For an audience raised on television, they provide an ideal setting for education, offering innovations for the classroom and combining fantasy, history, adventure, and learning. The classroom cannot compete with the world of popular culture with its creative imagination and enormous resources. Theme parks influence design, merchandising, and computer-assisted education, serving as modern museums and centers of historic preservation, where children can acquire history, lore, and myth. As a major acculturation method, theme parks are evocative, as opposed to literal, and make participants out of the viewer. They are knowledge clusters or exhibits, science, and communications; and provide a visual, tactile, and kinesthetic message about recent scientific information.

There has been no empirical research conducted on theme parks and their impact or effectiveness on education. As indicated in the following section, much has been written as to what various theme parks are doing to further education. The following members of the top 50 theme parks will be reviewed: Knott's Berry Farm; York's Wild Animal Kingdom; Walt Disney Corporation--which includes the Magic Kingdom, MGM-Disney Studios, Epcot Center, Disney ABC, and Disney Software; and Anheuser-Busch--which includes Busch Gardens, Sea World, Cypress Gardens, Adventure Island, and Sesame Place.

York's Wild Kingdom is located in York Beach, Maine. In 1995, York's Wild Kingdom's attendance increased 5% from the previous year (Powell, 1995). The park was started in 1950 by Max and Sam Spector. In 1980 the Godzbein family purchased the park from the Spectors. There are amusement rides, a bungee jump, and a miniature golf course. However, the park's emphasis is placed on the monkey exhibit, the elephant exhibit, and the bear exhibit. York's Wild Kingdom houses Maine's only white tiger. The emphasis of York's Wild Kingdom is on animal conservation, biodiversity, and understanding how man can destroy the habitats of these animals.

Knott's Berry Farm began over 40 years ago as a berry picking farm. Less than ten years later, the proprietors began to transform it into an amusement park. Knott's Berry Farm developed Dinosaur Days in 1993. The focus of Dinosaur Days is to educate children of all ages about dinosaurs, their existence, and extinction. To help visitors learn about dinosaurs, there are 21 animated dinosaurs in the park. Visitors can also experience dinosaur lectures, dinosaur digs, and interactive dinosaur exhibits. Knott's Berry Farm has opted to change its exhibits to educate rather than thrill. Visitors can also experience exhibits on Indian tales and Native Americans.

In 1955 Walt Disney opened its first theme park, Disneyland, in Southern California; however due to technological advances today, it represents the past. Disney World, in Central Florida, represents the present and recognizes that all children are well served in all theme parks. Disney has also pioneered this interest in adults as well. One problem Freeman (1991) noted was that hands-on excitement is missing in the theme parks. The issue of the leisure challenge presents the following problems: (a) people have very little time to play; people forget how to play; and they even forget what play is; and (b) play has become too structured; it is completely rule-bound and calls for little imagination. Visitors to theme parks tend to conform to technology with unquestioned acceptance. The leisure oriented solution would be to learn to use technology rather than just react to it; to be innovative and creative in approaching leisure options; and to use technology as an asset.

In 1995, Walt Disney Corporation attempted to become a force in educational software. The Walt Disney Corporation is one of the strongest brand names (Silverthrone, 1995), but it has been unable to extend its reach into the computer software arena. Walt Disney Corporation is hoping its software, Sleeping Beauty, can influence the education entertainment software market. Disney has formed an interactive division and is taking steps to ensure the company's talented animators and ride designers become involved in the multimedia projects. This new division is planning on releasing 50 interactive software titles in 1996. The senior vice president of edutainment is quoted in PC Week (1995) as saying "The objective is to take the company's strength in animation, story telling, and character development and apply it to software" (p.A1)" Disney's computer software division offers print kits and educational software that utilizes a variety of objects and activities that are displayed by the characters. Examples of Disney's educational software are Donald's Alphabet Chase (teaches the alphabet), Mickey's Runaway Zoo (teaches the numbers), and Goofy's Railway Express (teaches shapes). Another software program is Winnie the Pooh and the Honey Tree multimedia educational application. Based on A. A. Milne's Winnie the Pooh books, Disney has produced this multimedia application that includes several learning games that help teach reading, using an audio narration that follows the text.

In 1995 Walt Disney Corporation purchased Capital Cities/ABC for 19.5 billion dollars (Berniker, 1995). The purchase of this company will enable the companies to develop a wide range of interactive services. One controversy that has risen from this purchase is that of a lawsuit filed by the United Church of Christ and the Center for Media Education. The two groups are calling for the prevention of Disney's acquisition of Cap/ABC. Disney claims that the action is actually aimed at forcing it to allocate certain programming hours for children's educational television shows. Disney Corporation does not want to allocate any hours to children's educational television.

Recycle Rex, the mascot for California's Department of Conservation, has been adopted by Disney's California theme parks to help educate children on the importance of recycling and environmental issues (Schaffer, 1994). Disney has purchased the marketing rights to Recycle Rex and plans to introduce the character nationally as part of its environmental program.

Walt Disney Corporation also has a culinary apprenticeship program at all of its theme parks. This apprenticeship program is designed to upgrade restaurants at Walt Disney World (WDW) theme parks with well-trained chefs. The program ensures that students are exposed to all areas of the restaurant business, such as fast-food, fine-dining, garde-manger, bake shop, butcher shop, and commissary operations. The tuition for the three month internship is approximately $975.00 which includes three months of housing for first year students (Weinstein, 1993).

In 1995, Disney announced its plans to open a 500 acre Animal Kingdom Theme Park in Orlando, Florida (O'Brien, 1995). This park is scheduled to open in the Spring of 1998. This theme park will consist of three areas: mythological animals, extinct animals, and existing animals. Disney's Animal Kingdom will have an educational slant according to an interview with Michael Eisner in Amusement Business (O'Brien, 1995).

Project Celebration is a joint venture with Disney, Stetson University, and Osceola County Schools. This school is aimed at bringing together research proven instructional methods in one location (Natale, 1995). The students, junior and senior high school, will receive instruction in academics, employment skills, independent living skills, and social recreation and leisure skills. Another school program that Disney sponsors is the Challenge Program. This program is a drop-out prevention endeavor that allows high school students to work and attend school onsite at Walt Disney World.

In 1992, the Walt Disney Corporation received Personnel Journal's Optima Award in the Partnership category for it activities promoting the interaction of business professionals with students (Laabs, 1992). Walt Disney Corporation applied traditional and modern educational activities, mostly for formative-year students in elementary and middle school students, although the needs of older students were also addressed. In accordance with founder Walt Disney's principles on education, the Disney corporation believes education should be enjoyable and intertwined with entertainment. Most of the Disney organizations education outreach programs are conducted employing entertainment techniques to convey educational information.

The Anheuser-Busch theme parks (Busch Gardens, Sea World, Sesame Place, and Cypress Gardens) with the exception of Adventure Island and Water Country USA (the water parks) focus is on education first. Entertainment is its second goal according to it's park brochures.

Sesame Place, which is an Anheuser-Busch theme park, is located in Langhorne Pennsylvania. This park, originally created by the Children's Television Workshop, is a nine acre park that includes 50 attractions which encourages children to interact with other children while at play, using various muscles to help achieve better body conditioning. In addition to the rides at Sesame Place, there are exhibits and educational games.

Sea World is located in California, Ohio, Texas, and Florida. Based on its long-term commitment to education, Sea World strives to provide enthusiastic, imaginative, and intellectually stimulating atmosphere to help student reach their potential. The goals of Sea World's Education Departments are as follows:

- To instill in students of all ages an appreciation for science and a respect for all living creatures and natural environments.

- To conserve valuable natural resources by increasing awareness of the interrelationships of humans and the marine environment.
- To increase students' basic competencies in science and other disciplines.
- To provide an educational resource for the entire community (Sea World, 1994).

Sea World provides a variety of educational programs for students, adults, teachers, individuals, and Boy and Girl Scouts. All of the educational programs, with the exception of Adventure Tours and Camp Sea World, are conducted within the Sea World theme parks. The Adventure Tours program was created to help individuals recognize the human interest for travel and tourism and offers an opportunity to provide this special service. Participants will travel to various representations of world locations and study biodiversity. The primary purpose of each tour is to develop a greater appreciation and understanding of the natural world and wildlife parks, creating a unique educational experience. Camp Sea World is a week long residential program that provides students ages 12-18 to spend a week in the field and at Sea World for an in-depth and fun-filled experience as they dive in the Florida Keys, snorkel a coral reef, and explore the ocean wonders. While at Camp Sea World, students will also have the opportunity to sleep with sharks or manatees.

The Instructional Field Trip Programs are designed for students in grades pre-kindergarten to first grade, second through sixth grades, and seventh through twelfth grades. These programs are designed around the natural athletic abilities of marine animals. In this programs students will see two stadium shows that focus on animal adaptations for speed, strength, endurance, and survival.

Sea World's Home School program allows large groups of students to participate in a 90-minute guided tour that focuses on animal adaptations. Students have the opportunity to learn about and handle many Sea World residents, including sharks and invertebrates. In addition to the 90-minute program, students receive a behind-the-scene tour of the manatees and sea turtles.

Sea World's Marine classes are designed for students in first through twelfth grade. Students in grades 1-8 have the opportunity to learn about polar, endangered species, whales, and sharks. Student in grades 9-12 have the opportunity to learn about animal behavior, choral reef ecology, marine science careers, and comparative marine mammal anatomy. These classes are lead by experienced Sea World instructors. The instructors challenge the students to go beyond traditional classroom learning by experiencing first-hand the power of a polar bear, the gentleness of a manatee, or the agility of a rockhopper penguin. The purpose is for students to gain a clearer understanding of animals and their environments and man's effect on these environments. Emphasis is placed on hands-on learning and individual student discovery.

Sea World's parent participation courses are designed for children ages 3-5 and encourage interaction between the child and the parent while exploring Sea World. Students use role playing, song, crafts, hands on encounters, and other activities to learn about killer whales, dolphins, horses, penguins, sharks, seals, and the tide pool.

Sea World brings interactive educational presentations directly into the classroom via Shamu TV. Shamu Storytime is a series of 30 minute stories geared to preschool students. Shamu TV features a series of 50-minute programs for grades K-5 on such topics as Arctic animals, sharks, manatees, and whales. The goal of Shamu TV is to help students develop an ownership for the earth and its creatures. Each live program features live hosts from Sea World or Busch Gardens, up-close footage of the animals, interviews with animal experts, and a toll free telephone number students can call to have their questions answered immediately by animal experts.

Physics curriculums are available at both Sea World and Busch Gardens. Students have the opportunity to calculate the diving speed of a bottlenose dolphin, orka whale, sea lions, sea cows, and other marine life. At Busch Gardens, students have the opportunity to involve themselves in such principles as energy conservation, centrifugal force, and various other required calculations. Students learn the principles of kinematics, dynamics, and energy. Students will ride the rides, measure the forces and angles, and then compute speeds using a specially designed book to guide them.

High School Careers Camp is offered at Sea World of Texas. Through hands-on experiences with the animals, students from across the world have the opportunity to gain a greater appreciation for marine sciences. Students in grades 9-12 will have the opportunity to live at Sea World of Texas for one week to gain firsthand knowledge of marine life. Students accompany Sea World Zoological and animal training staff members as they perform their daily routines such as monitoring the health of sea lions, recording killer whale behavior, charting food intake of penguins, feeding stingrays, and helping prepare foods for otters.

Other Sea World educational programs include: behind-the-scenes tours, extended instructional field trips, gifted and talented classes, ocean discoveries, sleepovers, and workshops. In each of the above programs students visit and learn about in animal care, laboratories, conservation, animal husbandry, and animal training. The programs feature animal presentations, self-guided tours of animal habitats, and a teacher curriculum guide.

Sea World provides curriculum guides to teachers of all grade levels. Grades P-K teachers can obtain a curriculum guide for underwater friends. Curriculum guides for grades K-3 topics include: bottlenose dolphins, killer whales, manatees, walruses, whales, all about coral reefs, all about endangered species, penguins, animal behavior and training, marine ecology and conservation, seals, sea lions, and walruses, and sharks. Curriculum guides for grades 4-8 topics include: bottlenose dolphins, killer whales, manatees, whales, corals and coral reefs, endangered species, animal behavior and training, marine ecology, marine mathematics, marine conservation, seals, sea lions, and walruses, sharks, and whales. For grades 9-12, teachers are provided a curriculum guide on manatees. Each curriculum guide contains: scientific classification, habitat and distribution, physical characteristics, senses, adaptations for their environment, behavior, diet and eating habits, reproduction, hatching and care of young, communication, longevity and causes of death, conservation, a bibliography, and recommended books for readers. Curriculum guides are available from Sea World Education departments or from Netscape.

College students, adults, and educators have the opportunity to participate in seminars, symposiums, teacher workshops, and Sea Camps. Participants interact with curators, trainers, and animal care specialists to learn about current research and discoveries. College credit is offered to students and college credit and recertification or in-service points are offered to teachers.

Busch Gardens, Tampa Bay, is one of the top four zoos in the country. It is home to over 350 species, a number of which are endangered. The biodiversity of animals and plants at Busch Gardens, Tampa Bay, is a microcosm of the diversity of the natural world. Busch Gardens' conservation strategy is to demonstrate and preserve natural species, habitats, and ecosystems as well as to enhance local, regional, and world awareness of attitudes on conservation issues. By introducing the public to a few of the earth's enormous variety of animals and their habitats, Busch Gardens hopes that people will better appreciate the animals and want to take action to preserve them and seek resources to sustain them.

Busch Gardens has the only Special Education program, Investigating Animal Diversity at Busch Gardens, Tampa Bay and Williamsburg. It is designed to help the special education student understand the importance of diversity and how humans and animals contribute to the survival of all living creatures. Through hands-on experiences, demonstrations, interactive activities, and observations, students will learn about reptiles, mammals, birds of prey, parrots, and waterfowl, amphibians, insects, and arthropods. The Zoo Conservation staff has received special training on disability awareness. Specific training includes how to teach students with disabilities, how to interact with students with disabilities, and disability characteristics and its educational implications.

Busch Gardens, Tampa Bay, has curriculum guides available to teachers on such topics as tropical forests, biodiversity, endangered species, and grasslands. Each curriculum guide contains background information, vocabulary, activities, suggested readings, and learning goals.

Busch Gardens offers other educational experiences, one of which is Zoo Camp. Zoo Camp is designed to instill interest and enthusiasm for the natural world. Zoo Camp is an award winning program noted for its emphasis on environmental awareness. It includes hands-on animal experience, games, and learning activities that focus on human's roles in preserving the diversity of the earth. Zoo Camp is available every summer for grades Preschool and Kindergarten through adulthood. Each session lasts one week. In these camps students learn the differences in mammals, birds, and reptiles, how animals are adapted for survival, and how animals communicate.

Numbers in Nature, a math program at Busch Gardens, Tampa Bay, was designed as a fun way to show students how mathematics is used every day. Students will have the opportunity to see how calculations, estimations, problem solving, and logical thought processes are a part of everyday life. Student will practice mathematics skills as they ride roller coasters, observe animals, and learn about daily theme park operations. The activities are grouped by areas of the park and each student is provided with an activity book to facilitate learning, proficiency, and time on task.

Busch Gardens, Tampa Bay, also provides safari classes for ages 3 and older. In these classes students will have the opportunity to be introduced to rabbits, turtles, and many other zoo creatures. Activities, crafts, and games help preschoolers develop an understanding, love, and compassion for living things. The Junior Animal Keeper class helps 4 and 5 year olds learn about the individual care of animal needs. Really Reptiles is designed for students ages 6-9. The Night Hike, Behind the Scenes, and Photo Safari are designed for ages 10 and older. In these classes, participants will have the opportunity to see and learn about nocturnal animals and how they are adapted to darkness, tour the velt, and interact with animals in their natural habitats, and photograph animals.

The International Association of Amusement Parks and Attractions (IAAPA) Industry Institute is the professional organization for amusement park personnel. Every year this organization sponsors a conference on management development and interactive education. O'Brien (1992) noted that only senior level management personnel are invited to specific workshops dealing with effective customer service. However employees do not receive training in disability related issues.

Customer service is key to a successful business (Milillo, 1995). Without effective customer relations, all the money that has been invested in marketing and advertising is lost. Walt Disney Co. and Busch Entertainment Co. employees go through a training that will instill in them the idea that they are the key players in the workplace environment, and visitors come back year after year to experience that environment again.

Quality service delivery depends on the process as well as the outcome. Service delivery management must focus on both the technical and interpersonal aspects of a job in order to promote customer satisfaction. Service supervisors must translate their organization's mission into local terms. They must set standards and frequently give feedback, praise, and reinforcement to front-line providers. Very little specialized training is offered or provided for front-line personnel or service supervisors.

Good service is essential to a company's success and good management is the key to providing good service. Employees should be motivated to give good service by a sense of togetherness that stems from a company's effective communication network. A caring environment is fostered for both employees and customers; customers' needs should be continually identified and accommodated. Good training for all staff members is essential in developing the strong corporate culture needed for success.

Interviews with workers from service oriented companies such as McDonald's and Disney reveal five practices that other companies might apply to achieve good customer service (Whittle, 1988). These five areas include: (a) screening, testing, hiring, and assessing appropriate people to appropriate jobs; (b) training and motivating employees; (c) establishing goals, standards, and quotas; (d) measuring and evaluating the standards and goals; and (e) rewarding good performance. There are several ways to measure good customer service yet none deal with disability issues. Some of the most popular ways used in companies are: mystery shoppers, focus group interviews; and market research. Whittle has pointed out that good customer service does not happen over night. It may take years to achieve good customer service.

The first Disney University opened in Anaheim, California, in 1954. Every Walt Disney amusement park has a Disney University where employees are trained in various job-related disciplines such as quality assurance, human resources, computer training, and cast activities (Allen, 1992). Walt Disney Company's success in entertaining people is being taught to interested students and executives attending Disney University. Attendees can sign up for three-day courses that help them instill their personnel with the fun, courtesy and service-orientation made famous in Disney theme parks. However, none of the training courses offered by Walt Disney Company deal with disability related issues.

The Walt Disney Company offers a management course called "The Disney Approach to People Management" at its Disney World location (Blocklyn, 1988). Participants learn that the basis of Disney management is pixie dust; training, communication, and care combined to equal pride. Team work is highly stressed to the Disney family of cast members or employees. Cast management uses newsletters and video tapes to stress goals, which include communicating information and stressing traditions and values. Much hard work is done to maintain a quality atmosphere. Cast members, or employees, have a special department which coordinates employee service ranging from day care programs to picnics. The Disney people management plan (PMP) is another element of the Disney method. The PMP puts Disney ideals into practice: identifying and examining organizational purpose; plotting PMP methods; and analyzing PMP successes.

One reason for Disney's high revenues is its emphasis on customer service and a focus on the elements of efficiency, courtesy, show, and safety (Solomon, 1989). While Disneyland visitors see aspects of company courtesy when visiting the amusement parks, the theme of courtesy is extended in personnel management. Many years have been devoted to designing successful employee universities which train workers in the Disneyland philosophy. Some of Disney's successful employee training and hiring techniques include using peer interviews for hiring people and requiring employees to develop a modification or idea to be implemented by Disney. The company has found that it is important to stress that employee development is an ongoing process because reinforcement helps workers to stay committed to the company.

The research work at Western Electric's Hawthorne Works from 1927-1932 was a landmark study (Reiger, 1995). This study proved the existence of a relationship between human relations and productivity. The study initially focused on environmental factors such as lighting and temperature and their relationship to the productivity of workers. However, the researchers found that the subjects were responding more to social and personal variables such as management consideration, group affiliation, and special recognition. The study proved that interpersonal relationships improved morale which, in turn boosted productivity. As a result of this study, several fields came into prominence, including industrial psychology, personnel management, organizational development, and human resource development. This study also served as the basis for industry training in the 1990s, which focused on team building, systems, thinking, and shared decision making.

Coye and Belohlav (1995) examined the concept of employee involvement as it relates to programmatic participative management initiatives implemented in Fortune 1000 companies. Coye and Belohlav sought to establish if the degree of employee participation within these programs was related to information sharing, training, decision making, and rewards. Their findings lead to support the hypothesis that the level of employee involvement within a company is related to the use of employee empowerment initiatives and average employee involvement within company programs.

Tesluk, Farr, Mathieu, and Vance (1995) examined the generalizability of employee involvement training to the job setting specifically examining the individual and situational effects. Tesluk et al. examined whether variables at the individual, unit, and suborganizational levels influence the extent to which the knowledge and skills learned in employee involvement training are generalized beyond specific employee involvement activities. The training generalizations occur when the knowledge and skills learned during training for a specific purpose in one context are applied to trainees in another context, specifically in regular job duties. Using a multiple cross level design, data gathered from 252 employees and supervisors drawn from 88 units across 11 suborganizations were used to provide support for both individual and situational effects. A hierarchical regression model was used and the results demonstrated that characteristics at individual units and sub-organizational levels significantly predicted the extent to which employee involvement knowledge, skills, and attitudes were generalized to the specific job related activities. The employees were more likely to use employee involvement training in performing core job activities. The more employee involvement activities they participated in, the greater the employee's commitment to the organization and the less cynical they were about the likelihood of positive organizational change.

Roberts (1995) collected data from more than 5,000 human resource managers in regard to their profit margin. Roberts found that 15% of the relative profit performance of a company can be attributed to the personnel function. However, the results show that the impact of human resources management on the bottom line differs according to the organization's size, market structure, complexity, and growth. The study also found that management training programs can enhance business performance by improving the performance of both top and middle managers. Roberts' findings also suggest that companies can boost their profitability by as much as 15% by making sure that managers are involved in planning and sharing information, the decision making process, and that they are satisfied with their participation in these activities.

Previous research into the processes and outcomes of training have been restricted to in-house closed training. However, learning is likely to become increasingly open with greater discretion granted for individuals to choose how and when they will acquire new skills and information. Warr and Bunce (1995) followed 106 junior level managers over a seven month period of time. They investigated the impact of eleven trainee characteristics in relation to immediate learning scores, reactions to the program, and changes in job related behaviors. Warr and Bunce found that learning scores were significantly independent as predicted by general training attitude, the use of a learning strategy, and age. The post training reactions were identified in three areas: reported employment, usefulness, and difficulty. These three areas were shown to be differentially associated with the trainee characteristics studied. Significant associations were found between the learning scores and changes in rated job performance.

Lakewood Research (1993) examined the effects of employer sponsored training. They sent out two variations of a questionnaire to 5,241 American corporations. 2,500 were returned giving a return rate of 48%. They reviewed the responses and found that employer sponsored training activities in the United States revealed that such programs are costing companies billions of dollars annually. The involvement in such employee training has slowly integrated into existing business operations. Specifically, that formal training systems used by organizations of 100 or more employees provided significant data on the size, nature, financing, people involved and the topics discussed during such employer sponsored training.

Training programs can be more effective and interesting through the use of technology, storyboarding, sound recordings, shared decision making, and sharing in the planning and implementation of information. No one way is shown to be the best method of increasing the outcome of employee training, however, the reoccurring themes that are shown to be effective are: sharing in the planning and implementation of the training, active participation and involvement in the training, ownership, and rewards.

In spite of all the good that theme parks do in the area of education, few if any provide their employees with any type of introduction to individuals with disabilities. Little literature exists concerning employee interaction and attitudes toward customers (guests) with disabilities. This study is important because it will provide relevant literature concerning employee knowledge of individuals with disabilities. Another area to be examined will be to determine if the increased knowledge of individuals with disabilities change the way employees interact with guests with disabilities and whether employees have a better attitude toward guests with disabilities thus increasing customer service and company profits.

Adult Learning Issues

Researchers involved in the adult learning issues use the term andragogy (Merriam & Caffarella, 1991; Mezirow, 1981; Tracy & Schuttenberg, 1986) to describe the way adults learn. Adult learning appears to be more self-directed, hinging on the relevance of the material to daily needs. Rossing and Long (1981) suggested that curiosity and relevance are strong motivators for engaging in adult learning activities. They suggested that adults are less ready than children to accept having to learn things that are not clearly relevant to their daily lives.

Rossing and Long (1981) surveyed 79 participants, ranging from 21 years to 52 years old. Participants rated sealed take-home material on (a) perceived value and (b) desire for further knowledge. It was hypothesized that the desire for knowledge would show a positive relationship to perceived value and that perceived value would be the best predictor of desire for knowledge in a multiple regression analysis. Using the mean rating for each set of materials, with a correlation factor of 0.84, there was a significant and positive relationship found between perceived value and desire for knowledge. The results appear to support the importance of relevance for learning.

Because of the desire for relevance in learning, it is assumed that adults have developed their set of references which they seek to further develop. Check (1984) noted that adults have a more definite purpose in attending learning situations and bring to the setting knowledge and experiences they have previously encountered.

Tracy and Schuttenberg (1986) explored adult learners' rationale for learning situation interaction preferences. They identified eight major categories governing preferences in interaction with instructors including (a) instructor knows best, (b) instructor should be more authoritative, (c) students need structure, (d) students desire involvement in tailoring the learning situation to meet their needs or values, (e) students want to be involved in the learning process, and (f) instructor should be responsive. Three hundred fifty-nine adult learners, drawing from two groups with mean ages of 34.8 and 68.4, were asked to rank the above categories according to their preferences. The most frequently occurring category of response for both groups was that "the instructor knows best," followed in order of statistical significance by "students want to be involved," and "the instructor should be authoritative." Both groups indicated the largest percentage of responses in instructor-related learning. While the results indicated that preference is for the instructor to be in control of the learning situation and to present an authoritative presence, the authors pointed out that the instructor's role should change from more directing to more facilitating as the maturity of the learners increases, while still adhering to the preference for instructor-directed activities.

Similarly, Check (1984) administered 154 surveys to adult learners in a university setting. One hundred nineteen survey forms were returned for a return rate of 77%. Three age groups of participants were involved (20-40, 41-60, and 61+) in this study. Each were asked questions concerning preferences for learning situations. The researcher used Chi-square analysis on all 20 items in the survey (for differences in sex, educational level, and age). The results indicated that 75% of both males and females preferred an eclectic approach to learning, depending on the instructor to bring meaning and insight to the content material. Examining the style of delivery, 94% of the respondents, covering all age groups, educational levels, and sexes, reported that they preferred a combination of lecture and discussion. In other areas, majorities reported that they preferred structure, instructor determination of course content, and advance planners. Check concluded that, contrary to other research claims, adults prefer a great deal of freedom in the learning situation. The majority of respondents in his study preferred more instructor-related control.

Boud (1986) maintained that much adult learning is constrained within the parameters set by the instructors and based on faulty assumptions of complacent acceptance of instructional rules. He further explained that adult learners have significant experiences that should be drawn upon in the learning situation and that they have an opinion about what it is that they wish to learn. However, his views that learning should be relevant to the needs of the learners appeared to support other authors cited in this discussion.

Whatever the preferred method of learning, Even (1988) stressed that adult learners bring to any learning situation a particular set of preconceived notions that may affect learning regardless of how it is offered. These preconceived notions include such issues as: (a) age, experience, and self-concepts, (b) physical nature and aging developments, (c) philosophy and values, (d) emotions and memories, (e) motivation, attitudes, and interests, (f) culture, history, and preferences, and (g) intellectual abilities and perceptions.

Even (1988) makes the point that teaching adults must be a facilitative process that is sensitive to the extraneous issues the person is bringing to the learning environment. This would appear to have particular merit when considering the training of employees. Many of the stressors indicated in earlier sections, especially the fear of the unknown, is a large preconceived notion which trainers must take into account.

This study is important in that the majority of employees in the workforce are adults. Adult learning hinges on the relevance of the material to daily needs and adults are less ready than children to accept having to learn things that are not clearly relevant to their daily lives. Employees interact daily guests with disabilities. It is clearly relevant to demonstrate to employees the need to become aware of disability issues and how the employees' interactions and attitudes effect guests with disabilities.

Training Models

Employee training is receiving increased attention as companies try to get results out of every investment. An emerging trend is employee specified training topics. The effectiveness of a training program rests on the ability of the trainer to maximize the program's accessibility to all participants. This means that ensuring all participants with or without a disability are provided with necessary assistance and support throughout the training program.

Disability awareness programs provide employers with a proven means to help break down the attitudinal barriers that are often the biggest obstacle to the integration of the persons with disabilities. The Disability Awareness Package (Gething, 1994) is one such package that has been used throughout Australia, Canada, and the United States. It was designed to be used with rehabilitation and service delivery personnel in order to promote positive attitude changes toward and increased accuracy about life with a disability. Therefore given the above reasons, the Disability Awareness Package (DAP) has been selected for use in this study.

The Disability Awareness Package (DAP) contains two manuals and a video tape containing scenarios which present interactions between people with and without a disability. Section one of the DAP covers general issues about life with a disability. Topics include (a) historical context, an explanation of the distinctions between disability, handicap, and impairment, and origins of attitudes and their effects on the quality of life of a person with a disability, (b) government philosophy and legislation, (c) service provision issues for people with double disadvantages (for example women, minorities, and those living in rural areas), (d) individual, family, and community, (e) common myths and realities, (f) attitudes and their consequences, (g) appropriate language and behavior, and (h) access to generic services.

Section II of the DAP includes such topics as: (a) intellectual disability, (b) epilepsy, (c) vision impairment and blindness, (d) hearing impairment and deafness, (e) mental illness and psychiatric disability, (f) dementia, (g) multiple sclerosis, (h) paraplegia and quadriplegia, and (I) Cerebral Palsy. The material in each module takes a holistic view of the disability which emphasizes the implications for the individual, family, and community members. The information is designed to demonstrate how many of the handicaps associated with a disability reflect environmental and social factors rather than the characteristics of the person with a disability.

A facilitator's manual is also included with detailed directions on how to plan, prepare, conduct, and evaluate a disability awareness workshop. The DAP is designed for flexibility to enable facilitators to modify the strategies and contents of the workshop to meet the needs and interests of a particular group. Emphasis is placed on people with and without disabilities working together to create a sense of sharing and cooperation. The strategies used are to avoid "us versus them" situations (DAP, 1994). Strategies included are guest presenters with a disability, small group exercises, simulations, and large group discussion of issues. Role modeling of appropriate behaviors is provided through interactions between the facilitator and guest presenters with and without disabilities.

The DAP was presented throughout Australia. The workshops were conducted for professionals involved in rehabilitation, implementation of government policy about people with disabilities, and service delivery personnel. Random selection was used to assign people to a control or treatment group.

A control group was used (N = 94; 50 men and 44 women); these individuals did not participate in any of the workshops. The workshop sample consisted of 99 (37 men and 62 women) people who participated in the disability awareness workshops. Ages ranged from 16-62 for the workshop sample and 20-62 for the control sample. Both samples had similar levels of education.

Two instruments were used to measure the effectiveness of the DAP, the Interaction with Disabled Persons Scale (IDP) and the Facts about Disability Scale (FAD). Test-retest reliability of the IDP was assessed on eight occasions, with coefficients ranging between +0.51 for a one year period and +0.82 over a two week period. Internal consistency for the IDP was assessed on 15 occasions, with Cronbach's alpha coefficient varying between +0.74 to +0.86. Results for both of these forms of reliability compared favorably to those reported for other measures of attitudes towards people with disabilities (Antonak & Livneh, 1988).

The Facts about Disability (FAD) consists of a series of twelve statements concerning disabling conditions. The initial version of the FAD Scale was assessed for face and content validity by a group of five experts in the field of rehabilitation and disability. Following minor revisions, the instrument was included in a larger study with the IDP Scale, for which a Pearson's product moment correlation emerged: $r(86) = -0.27$, $p = 0.01$ (Gething & Wheeler, 1992). Internal consistency as indicated by Cronbach's coefficient alpha is only moderate in size. A coefficient of 0.49 was obtained from a sample of 227 people, indicating the FAD has a moderate item homogeneity.

Data analysis of the DAP workshops indicated significant changes occurred for the workshop group in both the IDP and FAD questionnaire scores indicating moves occurred toward more positive attitudes and accuracy about information possessed about a disability. A t-test was for independent means was conducted on the pre-post difference scores to assess whether changes on the IDP displayed by the workshop group exceeded those for the control. This followed an analysis of covariance showed a significant group main effect after controlling for the pretest IDP scores. Thus, participating in the disability awareness workshop produced positive changes in attitudes toward persons with a disability.

Another form of disability awareness training is simulations. Simulations can be an important tool in helping people develop a sense of how people with disabilities cope with the disability. Beyond developing a sense of awareness of coping skills, simulation might also provide a glimpse of the untapped potential of people with disabilities. Most all of simulation research is being conducted with high school and college-aged students.

Curricular interventions and various programs of exposure to individuals with disabilities have been created to help modify negative and stereotypic attitudes. Curricular interventions are particularly useful in academic settings (Fiedler & Simpson, 1987). Simulation activities such as walking blindfolded, trying to read Braille, or listening to an audiotape of mumbling have been developed to improve communication and interpersonal relationships between people with and without a disability.

Wesson & Mandell (1989) gave specific guidelines for simulations. The goal of a disability simulation is to develop an understanding of how people with a disability learn to adapt and cope. The guidelines for simulations are as follows:

1. The simulation must be carefully selected to provide as realistic an experience as possible. The presenter may choose simulations that can be repeated in or out of the classroom.

2. The simulation should be designed to be repeated a minimum of four times in order for the participant to have an opportunity to determine how to make the task progressively easier.

3. The written directions must be clear and practical. Participants should be allowed to read the directions and ask questions for clarification prior to attempting any activity. Safety is imperative.

4. If possible, an observer should watch the person experiencing the simulation. Peers, parents, siblings, or roommates can serve as observers.

5. Following repeated simulations, the participants should respond in writing to the experience and a discussion should follow.

6. In order to guarantee accountability of the participant, the observer should also document the participant's reaction to the activity as well as his or her own.

Hallenbeck and McMaster (1991) conducted a disability simulation day for students in grades 6 through 12. The program focused on varied disabling conditions such as dyslexia, paralysis, vision impairment, hearing loss, and speech impairment. Fourteen students volunteered to participate in the study. The participants selected a disability they would adopt for the day. Once a disability was selected, equipment was obtained from schools, local businesses, and from people with disabilities. Students met together for thirty minutes prior to beginning the day to review rules and procedures. Two days after the simulations occurred a school wide assembly was conducted to inform the school of their experiences. Participants explained their reaction to having a disability for a day. Guest speakers with disabilities where brought in to tell the audience that having a disability did not necessarily limit their potential and ability. The assembly closed with comments from the participants who shared their experiences of being disabled for a day.

The results of the one day simulation and assembly program were encouraging (Hallenbeck & McMaster, 1991). However, the one day simulation did not provide a full understanding of what is means to have a disability, It did, however, offer a glimpse of the feelings and needs of people with a disability.

Disability awareness programs and simulations provide employers a proven means to break down attitudinal barriers that are often the biggest obstacle to the integration of persons with disabilities in the workplace. Awareness programs work on the assumption that employees are more likely to accept coworkers with disabilities if they can appreciate the difficulties these workers encounter because of their disabilities. These programs frequently require participating employees to go through a series of simulation exercises that represent conditions that people with disabilities may experience. Awareness-raising programs enhance participants appreciation and understanding of common disabilities.

Storyboarding is another effective, flexible, and comprehensive tool that can be used by a group to devise creative concepts and solutions to problems (Higgins, 1995). The first step in storyboarding is to define the problem to be solved. This is followed by a group brainstorming session to determine specific headers, purpose and miscellaneous. The third step in the process is to determine other headers as a complement to the two earlier ones. Storyboards are classified into four principle levels: planning, idea, organization, and communication boards. Each level requires two types of storyboard sessions. Aside from being flexible and adaptable, storyboarding is considered by managers as one way to address complex issues requiring creative solutions.

Training models are critical to increasing employee awareness of individuals with disabilities. This study is important because a growing number of companies in the United States provide disability awareness trainings and etiquette trainings as more managers realize the practical benefits that can be gained from improved etiquette in the workplace. The benefits include better customer service, higher customer retention, reduced customer-employee stress, and reduced harshness among employees.

Knowledge About Persons with Disabilities

Little research exists that measures knowledge of or about persons with disabilities. What does exist coincides with other instruments that measure attitudes

(Antonak, 1994; Gething, 1994) and disabling language (Patterson, 1987). No research has been conducted that examines employee or service provider's knowledge of or about customers with disabilities.

The concept of disability language and people first language has received increased attention since the passage of the ADA in 1990. Disabling language can be seen as an obstacle that impedes communication and perpetuates negative stereotypes. Disabling language perpetuates myths and stereotypes about persons with disabilities, uses the disability as a noun instead of an adjective, or uses a demeaning word or an outdated word, term, or phrase.

Patterson (1988) reviewed a number of interrelated issues and questions involved in disabling language and to describe their implications for rehabilitation professionals. Five issues related to disabling language were identified. Those issues include: (a) the evolutionary nature of disabling language, (b) the lack of general support for the concept, (c) the lack of consistency in implementing standards, (d) the ambiguity concerning the meaning and effect of disabling language, and (e) the lack of a data base to support changing patterns. Three journals, Journal of Rehabilitation, Journal of Applied Rehabilitation Psychology, and Rehabilitation Counseling Bulletin, were examined regarding their usage of "the disabled," "disabled person," and "person with a disability." 69% of the titles in the Journal of Rehabilitation contained the phrase disabled person, whereas 6% of the titles used the phrase the disabled, and 25% of the titles used the phrase person with a disability. In the Journal of Applied Rehabilitation Counseling, 4% of the titles contained the phrase the "disabled", 70% "disabled person", and 26% a "person with a disability." In the Rehabilitation Counseling Bulletin none of the titles used the phrase the "disabled", 65% used the phrase "the disabled person" and 35% used the phrase "person with a disability."

The role of disabling language in perpetuating more negative attitudes has not been investigated, although differences in ability, effort, and task difficulty have been found between persons labeled mentally retarded and nonlabeled persons. Without research, one cannot determine whether the language "the disabled" perpetuates more negative stereotypes than the term "person with a disability." Language patterns are slow to change, but the evaluation of journal titles suggests that language patterns have changed since the passage of the ADA.

Antonak (1994) used the Test of Knowledge About Mental Retardation, a 20 error-choice item test, to measure a person's attitude towards persons with disabilities. This instrument served a dual purpose. The true purpose of the test (measurement of attitudes) is disguised by the inclusion of a 20 item general-knowledge test about mental retardation. Two hundred fifty-one graduate and undergraduate students enrolled in nursing, counseling, educational research, general education, and special education classes served as the sample. Data was also collected on age, gender, marital status, educational level completed, and professional specialization.

Participants were asked to voluntarily participate in a large scale investigation about knowledge of mental retardation. After the participants finished the 20 item test and turned in their answers, the participants were informed about the true nature of the test and given an opportunity to ask questions about any aspect of the study and about persons with mental retardation.

The Test of Knowledge About Mental Retardation's mean of the item to overall score correlations corrected for redundancy was 0.32 with a mean item difficulty of 0.53. The mean score for the sample on the Test of Knowledge About Mental Retardation was 10.67. The value of the Spearman-Brown corrected KR-21 split-half reliability estimate was 0.55 with a standard error of 1.94. The values are considered reasonable for a measure composed of 20 dichotomous items with unequal item difficulties.

Antonak found the 20 item error choice measure of attitudes toward persons with mental retardation adequate and the measure's reliability was acceptable. Factor analysis confirmed homogeneity of the test items. The scores were significantly related in the predicted direction to age and to a composite variable representing familiarity with persons with mental retardation. The Test of Knowledge About Mental Retardation is useful for investigating the attitudes of service providers whose responses to a questionnaire may be biased by respondent sensitization and social desirability responding.

Little research exists that measures knowledge about individuals with disabilities, let alone employee knowledge about individuals with disabilities. This study is important because no research has been conducted that examines employee or service provider's knowledge of or about customers with disabilities. What literature that does exist coincides with other instruments that measure attitudes.

Attitudes Toward Persons With Disabilities

Most people in the community do not have ongoing close contact with someone with a disability. They rarely have the opportunity to test their beliefs about or get to know persons with a disability directly. As a result people may view people with disabilities as strange and different and experience uncertainty and discomfort at the prospect of meeting and interacting with them. The ADA (1990, Public Law 101-336) guarantees equal opportunities for all people with a disability in employment, public accommodations, transportation, state and local services, and telecommunications. For this reason, it is important that all service delivery providers be accurately informed about and hold realistic attitudes toward people with disabilities.

Many people believe that the greatest barriers to full participation in society are not their disabilities or inaccessible buildings, but rather biased attitudes and treatment by persons without disabilities. The nature of contact between people with and without a disability is an important consideration. Yuker (1988) argued that the following features are required for positive attitude change:

1. The person with a disability should be competent, valued by other parties, socially of similar status to others, skillful, able to communicate effectively, accepting of, and willing to discuss his or her disability openly.

2. Participants without a disability must attend voluntarily, believe they have something worthwhile to contribute and to learn, and must be willing to take an open approach.

3. The atmosphere must be relaxed, nonthreatening, mutually rewarding, conducive to learning, and must be one in which each individual with a disability can openly express and display strengths and abilities as well as limitations.

Research on attitudes toward people with disabilities is categorized into three categories: student attitudes (Donaldson, Helmstetter, Donaldson, & West, 1994; Eichinger, Rizzo, & Sirotnik, 1991; Garske & Thomas, 1990; Shapiro & Margolis, 1988), employer attitudes (Christman & Slaten, 1991; Levy, Jessop, Rimmerman, and Levy, 1992; Minskoff, Sautter, Hoffman, & Hawks, 1987; Schmelkin & Berkell, 1989), and community attitudes (Makas, Finnerty-Fried, Sigafoos, & Reiss, 1987; Makas, 1988; and Gething, 1991).

Only a few studies have addressed students attitudes toward and interactions with peers with disabilities. Many of those studies have involved structured interactions in the form of tutoring and friendship programs or sharing information about people with disabilities via films, discussions, or simulations.

A model of systematic intervention to facilitate attitude change was reported by Eichinger, Rizzo, and Sirotnik (1991). The researchers tested the effectiveness of the paradigm through the use of a pretest-posttest control group experimental design. The sample consisted of 102 college students enrolled in special education classes. Forty-nine students were in the experimental group and 53 students were in the control group. The experimental group received an intervention containing readings, lectures, class discussions, site visits, guest speakers with disabilities, and persuasive messages. The control group received disability related information in an eight week class through the presentation of lecture material. A pretest-posttest consisted of the administration of the Attitude Toward Disabled Persons Scale (ATDP). The ATDP was designed to measure attitudes toward people with disabilities across disability groups.

An analysis of variance indicated that the experimental group had significantly greater improvement in attitudes than the control group (F(1,100) = 10.34, p,0.01). The researchers concluded that the experimental intervention incorporating the systematic attitude change procedures described above had a positive effect upon the attitudes of students. Through statistical analysis, researchers reported that the presentation of knowledge and information regarding disability issues in a systematic manner can positively influence attitudes toward persons with disabilities.

The study by Eichinger et al. (1991) was limited in two ways. The samples utilized were volunteers from education classes who had been assembled prior to the beginning of the study. These samples were not random, thus generalizability is questionable. Second, the study used the ATDP scale as the pretest-posttest measure to access attitudes. Although the researchers conducted reliability checks, there is still some debate regarding the viability of this instrument to measure attitudes. Cronbach's alpha measure is a measure in internal consistency of the items in the survey. This analysis does not offer evidence regarding content or construct validity.

Donaldson et al. (1994) conducted a study which measured the effects of a short- and long-term unit on high school social studies classes on tenth graders' attitudes toward persons with disabilities. The unit was required by all students. The purpose of their study was to determine whether the unit would produce immediate change in student attitudes toward, and amount of contact with, peers with disabilities. A follow-up study was conducted six months later to measure the long-term change in student attitude and amount of contact of peers with disabilities.

The unit was designed to promote an increased awareness, understanding, sensitivity, and acceptance and interaction with peers who have a disability. The activities were conducted over four consecutive days. Each session lasted 55 minutes. Four of seven social studies classes were randomly assigned to the study, which included a pretest, intervention, posttest, and a follow-up test six weeks later.

Participants were administered the Acceptance Scale: Secondary Level (Version B) (Voeltz, 1981). This 37 item survey is group administered, three-answer Likert scale (agree, disagree, undecided). The items reflect randomly varied positive and negative statements related to people with disabilities. Data analysis revealed the control group had a mean score of 1.56 with a standard deviation 0.44. The treatment group had a mean score of 1.59 with a standard deviation of 0.38. The researchers concluded that the disabilities awareness unit did have a significant short term effect on increasing persons attitude toward people with disabilities.

The researchers reported long terms effects had a significant difference in the amount of contact as reported on the pretest and six-month follow-up test. A comparison of pretest and follow-up scores indicated that the significantly higher attitude scores were maintained. However, for contact items there was not a significant difference between pretest and follow-up scores.

Limitations of this study include no control group. This would mean that the results of the six-week follow-up could have been due to maturation of the students or some interim event. A second limitation was the lack of random assignment to the groups. Due to the lack of randomness the results may not be generalizable and do not assure equivalence of the groups. The students were preassigned to social studies classes, yet there was no difference in ability levels among the groups. Finally, the students did report an increase in contact; however, no data were collected to measure the quality or type of interaction students without disabilities had with students with disabilities.

Garske and Thomas (1991) examined the attitudes of graduate students in rehabilitation counseling classes toward people with disabilities. The study consisted of 80 students from ten rehabilitation counseling programs in nine states. The participants volunteered to complete the Issues in Disabilities Scale (IDS) (Makas, Finnerty-Fried, Sigafoos, & Reiss, 1987). The IDS is a 55-item inventory designed to measure cognitive and affective components of attitudes toward people with disabilities. The internal consistency coefficient alpha of 0.86 was reported for the IDS. The IDS was found to be a reliable and valid instrument.

The participants had one semester to return their IDS. The overall group mean of the IDS was 285.9 with a standard deviation of 27. The mean score obtained by the participants was comparable to the mean score of 293.1 as reported by the initial standardization sample of the IDS. Using a one-way analysis of variance, the researchers reported finding no significant relationship between the IDS and the contact variable of living experiences with people with disabilities, employment experiences, or practicum experiences.

It is important to note that the lack of a significant relationship may be due to the homogeneity of the study group. Therefore the findings may not be generalizable to the general population.

The perception of an individual's value in the United States is frequently determined by one's earning power, the type of job held, and the amount of participation in the workforce. Some people assume that people with disabilities are unable to work, except possibly in a highly sheltered work environment. Such negative attitudes toward the employability of people with disabilities may affect their success in securing and maintaining employment

Levy, Jessop, Rimmerman, and Levy (1992) surveyed Fortune 500 industrial and service corporate executives who are responsible for hiring decisions 341(1,140 surveys mailed, 341 surveys returned, return rate 30%). The researchers were interested in finding the attitudes of corporate executives responsible for hiring persons with disabilities, which organizational and individual factors differentiate corporate executives who are more favorable to hiring employees with disabilities, and is it the characteristics of the person with a disability or the characteristics of the organization that affect corporate executives toward the employability of people with disabilities.

The Attitude Toward Disabled Persons Scale (ATDP) and the Attitudes Toward the Employability of Persons with Severe Handicaps Scale (ATEPSH) were sent to the Directors of Human Resources, Directors of Personnel, Managers of Human Resources or to an equivalent officers. The sample pool received four separate mailings and a telephone follow-up. The ATEPSH examined two factors. Factor I the appropriateness of competitive employment and Factor II the disadvantages of competitive employment.

The researchers reported the mean score on the ATDP was 119.0 with a range of 56 to 166. The mean ATDP standardization sample was 116.68 with a standard deviation of 20.82. There is no way to determine significance because the initial sample norms did not contain information regarding corporate executives.

The researchers reported a mean score for Factor I of 4.51 with a standard deviation of 0.58 on the ATEPSH. The mean scores for Factor II was 3.72 with a standard deviation of 0.60. The mean of Factor I was slightly lower and the mean for Factor II was slightly higher than the published means. The range of scores was 1 to 7. An analysis of variance was conducted to compare the mean attitude scores of categories of

16 independent variables. The variables that produced significant differences could not be designated individual or organizational factors. The most consistent differences concerned disability-related variables, with more positive attitudes existing when the organization had hired persons with severe disabilities within three years.

The overall results, as reported by the researchers, showed that corporate executives responsible for hiring had favorable attitudes toward the employment of people with disabilities, both in terms of the advantages to the individual and the lack of disadvantages for others in the work setting. Having a disability oneself or contact with a person with a disability in a family context were not predictive of more favorable attitudes. The findings suggested positive contact around work determined attitudes towards employability and that attitudes toward people with disabilities in general were affected by such employment contact.

The limitations of this study included a low return rate (30%) and a lack of detailed questions about the type, nature, and extent of contact with people with disabilities, contact should also be specified as personal or professional, and in the employment area, hiring executives personal experiences should be expanded.

In a similar study investigating the attitudes toward people with disabilities and their impressions of the employment potential and recommendations for hiring of female applicants in a simulated interview was conducted by Christman and Slaten (1991). Twenty-five organizations were contacted at random and managerial personnel were asked to participate if they indicated that they were involved in hiring decisions. One hundred twenty people (58 men, 62 women) participated in the study. The ages ranged from 25 to 60 and all had at least two years of college.

The Attitudes Toward Disabled Persons Scale was selected to measure the general attitudes toward people with disabilities as held by the group of employers. The reliability of the ATDP has been reported from 0.66 to 0.89. The Cronbach alpha coefficient was computed at .77. The independent variable was the physical condition. An applicant with no physical disability was selected as the control. Video tapes were chosen as the medium to present the stimulus because it allowed the researchers to convey more cues than could be obtained through photographs or slides.

The dependent measures included a list of 22 adjectives that described personal traits thought to influence employment potential. Participants were asked to respond to a nine point scale (1 being lowest and 9 being highest). A mean score for each subject for each factor was obtained. A Cronbach's alpha reliability score was calculated at 0.93. Using an analysis of variance the applicants depicted as disabled were rated higher on employment characteristics and management potential than people without disabilities. The mean scores for the applicant in a wheel chair fell between the scores for the other two conditions but were not significantly different from either. The researchers reported that the respondents appeared to be more positively oriented toward people with disabilities.

Schmelkin and Berkell (1989) were concerned with the lack of appropriate instruments that measured educators' attitudes toward the employability of persons with severe disabilities. Another problem the researchers noted is the small number of studies in the area of attitudes toward the employability of persons with severe disabilities. In order to assess educator's attitudes, Schmelkin and Berkell developed a new instrument to measure educator's attitudes.

Some general concerns that Schmelkin and Berkell had were related to the appropriateness of training a placement of trainings, types of training, and the rights of individuals with severe disabilities. Another area of concern was the impact and feasibility of training and employment specifically the potential benefits and potential disadvantages. Lastly, the impact of hiring a person with a severe disability on employers, nondisabled employees, and the community in general was discussed.

The researchers sent out 200 questionnaires to special education and rehabilitation students and personnel in special schools who were instrumental to the education and hiring of persons with severe disabilities. One hundred sixty-eight questionnaires were returned yielding a return rate of 84%. The final sample consisted of general and special education teachers, administrators and service providers, and special education and rehabilitation students. The mean age was 31.5 and the majority of the participants were female.

Questions on the instrument focused on appropriateness of competitive employment, the disadvantages of competitive employment to others, the disadvantages of competitive employment to the individual with severe disabilities. Coefficient alpha were used to estimate the reliability of each of the three above subscales. The coefficients were 0.85, 0.60, and 0.68. Participants were asked to respond to a 7 point Likert scale on disagree very strongly to agree very strongly. The mean score for appropriateness of competitive employment was 5.25 with a standard deviation of 1.01. The mean for disadvantages of competitive employment: focus on others was 2.48 with a standard deviation of 0.84. The mean for disadvantages of competitive employment: focus on individuals with severe disabilities was 4.06 with a standard deviation of 0.95.

Inspection of the means indicated that the participants had relatively positive attitudes regarding the appropriateness of the employability of persons with severe disabilities. The participants did not perceive the disadvantages to be great. However, they were more ambivalent about the potential disadvantages of employment to people with severe disabilities. The researchers noted the ambivalence toward the disadvantages of employment for people with severe disabilities may be due to teachers' lack of experience. Teachers were not knowledgeable about the jobs people with severe disabilities held. Exposure and participation in vocational training programs may reduce the ambivalence and contribute to increasing teacher's attitude.

Minskoff et al. (1987) also looked at employer attitudes toward hiring people with learning disabilities. The researchers involved five states and the District of Columbia. Employers expressed positive attitudes toward making special allowances for employees as long as such allowances did not involve reduced workloads or involvement in the worker's personal life. It was noted that less positive attitudes were held by employers who hired people with learning disabilities.

Participants worked for companies that employed an average of 702 (standard deviation = 184) employees and personally supervised an average of 36 workers (standard deviation = 4). Of the 326 employers, only 10% stated that they had hired a persons with learning disabilities not receiving vocational rehabilitation and only 5% had hired a person with a learning disability who had received vocational rehabilitation.

The survey consisted of 12 multiple choice response items on a single page. This survey was to be completed by the person involved in the actual hiring of employees with disabilities. When asked if employers would make special allowances for employees with disabilities, 72% said they would make allowances. The most frequently cited allowances include: more support and encouragement, extra time for training, more detailed directions, and jobs better suited to the employee. 18% of the employees surveyed reported they would not make any special allowances. The most frequently cited reason was that it would not be fair to the other employers to make allowances for some and not others.

One major limitation noted was the low return rate. One thousand seven hundred eighty-four surveys were mailed to 892 businesses and 326 surveys were returned, yielding a return rate of 19%. Participants were randomly selected from Chambers of Commerce, Vocational Rehabilitation, and Directory of Principle Employers. Another major limitation was the lack of any reliability and validity information on the instrument used and the lack of any specific information on the instrument itself.

Most of the employers surveyed expressed positive attitudes toward making special allowance for employees with learning disabilities. However, their views were not equally positive toward the types of allowances. Most employers would be willing to provide encouragement and support yet not make reduction in workloads or involve personal lives of employees. Further findings indicated that employers expressed more positive attitudes toward hiring and making special allowances for the disabled in general than employees with learning disabilities. The survey item designed to measure knowledge revealed only 8% of the sample stated that they did not know what a learning disability was and 10% of the population had learning disabilities confused with mental retardation.

Makas, Finnerty-Fried, Sigafoos, and Reiss (1987) developed the Issues in Disability Scale (IDS). The IDS is a cognitive and affective measure of attitudes toward people with physical disabilities. The IDS is a 55-item using a 7 point Likert scale (strongly agree to strongly disagree). The IDS was administered to two samples. The first sample consisted of 86 undergraduates (45 females and 38 males) who did not have a disability and were taking an introductory psychology class in a mid-Atlantic University. The mean age of the first sample was 19.2 with a range of 17 to 32.

The second sample consisted of good attitudes. Good attitudes included individuals who did not have a disability, yet were identified by people with a disability as having a very positive attitudes toward people with disability. Sixty-three people (40 female and 23 male) were in the second sample. The mean age was 37.5 with a range of 18-63.

The IDS contains six subscales; education, legal, intimate social, non-intimate social, physiological, and psychological. The mean scores for the subscales were reported by the researchers as being: education mean = 30.48 (SD = 5.95), legal mean = 50.80 (SD = 8.06), intimate social mean = 31.46 (SD = 5.09), non-intimate social mean = 48.64 (SD = 7.71), physiological mean = 36.65 (SD = 6.64), and psychological mean = 39.20 (SD = 6.55). Coefficients for the subscales are; education 0.57, legal 0.65, intimate social 0.49, non-intimate social 0.62, physiological 0.65, and psychological 0.54. The intercorrelation of the IDS were between 0.26 to 0.80 with $p<.01$. A comparison of the intercorrelations within subscales suggests that attitudes toward people with disabilities are not unidimentional nor are they composed of discrete and easily distinguishable components.

The strongest support for the IDS's construct validity in measuring attitudes is the highly significant difference in the IDS scores between student subjects and good attitude subjects. As the researchers predicted, individuals without disabilities specifically identified by people with disabilities as having positive attitudes toward people with disabilities significantly was higher than the more random student subjects.

The following year, 1988, Makas examined positive attitudes toward people with disabilities focusing on the perspectives of people with and without disabilities. Makas used three samples in this study. The first sample composed of 92 (48 male and 44 female) professionals with a disability. This sample had a mean age of 38.3 with a range of 21 to 63. Subjects in this sample came from random places throughout the United States.

The second sample, the good attitudes sample, consisted of 69 (24 male and 45 female) people without disabilities. This sample group had a mean age of 37.5 with a range of 18 to 63. Each subject in the "disabled sample" was asked to recruit two people who held good attitudes toward people with disabilities, whom they knew personally, and who would be willing to participate in the study.

The third sample was students without disabilities. This sample group was composed of 83 (38 male and 45 female) undergraduate students from the George Washington University (GW). These students were randomly recruited from introductory psychology classes at GW. The mean age for this sample was 19.2 with a range of 17 to 32.

The "disabled" sample were given the IDS and asked to complete it anonymously. The "good attitudes" sample was given the IDS by the person who had recruited them to participate in the study. They were asked to complete the IDS and return it to the researcher. The "student" sample were administered the IDS in groups of 10-20. The student group was administered the test twice with the directions to answer one survey honestly and the other to fake to the best of their ability.

Means were calculated for the IDS by sample and by condition within the student sample. The researcher used the disabled response to determine positive directions for each answer on the IDS. Twenty items on the student sample were more negatively faked than their honest response. A one-way analysis of variance was conducted on the pairs to determine the significance levels between the means. These responses are identified as wrong direction items because people without disabilities were significantly more faked than honest responses.

The means by sample and condition were calculated within the student sample; significant differences were noted on the eleven items. The good attitudes sample group differed significantly from the items on the student honest responses when compare to the fake responses. Makas noted that on the two items which the disabled sample and the good attitudes sample differed significantly, the responses by the good attitudes remained significantly more positive than the responses by students in either condition.

The overall results of this study suggest that people with and without a disability differ significantly in their perceptions of what constitutes more positive attitudes toward people with disabilities. For the disabled sample group, more positive attitudes would include dispensing of the disability label. For the nondisabled sample group, positive attitudes reflect the helpful and congenial attitudes. People without disabilities need to be educated about disability and need to be made aware that people with disabilities may reject any special treatment that labels them as different.

Interactions between people with and without disabilities may cause a discomfort for all parties involved. Communication and the sharing of one another's experiences and expectations can be a valuable tool in breaking down barriers that contribute to discomfort. More research needs to be done to clarify discrepancies in perceptions between people with and without a disability.

Gething (1991) examined the generality versus specificity of attitudes toward people with disabilities. The Interaction with Disabled Persons (IDS) Scale was used as the measure. The IDS was devised to measure discomfort in social interaction that had been experienced by people with disabilities. The sample consisted of 481 people whose age ranged from 17-76. 49.7% of the sample were men and 50.3% of the sample were women.

Twelve parallel forms were used for the following disabilities: AIDS, alcohol, Alzheimer's disease, blindness, Cerebral Palsy, diabetes, Down Syndrome, drug dependence, epilepsy, paraplegia and schizophrenia. Each respondent was given one questionnaire and was unaware of any parallel form. Respondents were asked to state their level of agreement on a 5 point Likert scale to 20 items, in first person form, related to their discomfort in social situations. Factor analysis of the IDP scale indicated that 15 of the items significantly described social discomfort. Individual items of the scale have reliability coefficients ranging from 0.84 and 0.41 over a one week period of time and 0.81 and 0.35 over a four week period. The overall reliability of the IDS is 0.81.

The type of disability was found to have a nonsignificant effect on IDP ratings overall, t-tests were conducted to explore whether any differences occurred between the parallel versions of the scale. The mean scores and standard deviation scores for the disability areas are as follows: schizophrenia mean = 62.51 with a SD of 11.89, Down Syndrome mean = 61.77 with a SD of 14.84, paraplegia mean = 61.64 with a SD of 13.99, general disability mean = 60.76 with a SD of 13.27, Alzheimer mean = 60.30 with a SD of

9.83, alcohol dependence mean = 60.03 with a SD of 13.99, epilepsy mean = 58.25 with a SD of 10.87, Cerebral Palsy mean = 58.33 with a SD of 9.92, blindness mean = 56.83 with a SD of 16.25, AIDS mean = 56.67 with a SD of 8.39, drug dependence mean = 56.63 with a SD of 12.52, and diabetes mean = 54.94 with a SD of 12.86. The above mentioned results are listed in order of their positiveness of attitudes. The least amount of discomfort is found among people with diabetes, drug dependence, and AIDS, while schizophrenia, Down Syndrome, and paraplegia were associated with the most discomfort. Gething reported that no significant differences emerged between responses to the general concept of disability and specific conditions. This indicated that the IDS can be used to gather information relevant for specific disability areas.

Most people in the community may not have ongoing close contact with someone with a disability. People rarely have the opportunity to test their beliefs about or get to know a person with a disability. This study is important because research clearly demonstrates that interactions with people with and without disabilities may cause a discomfort for everyone involved. Communication and the sharing of one another's experiences and expectations can be a valuable tool in breaking down barriers that contribute to discomfort. Eichinger, Rizzo, and Sirotnik (1991) emphasized that increased contact with a person with a disability increased the comfort level of the person without a disability when interacting with a person with a disability.

Interactions with People with Disabilities

Nonaccepting or negative attitudes in people without disabilities have been linked to the literature with a range of emotions and motivations. Gething (1984) summarized the emotions and motivations as follows: (a) fear of the unknown or anxiety associated with being unsure of how to behave or what to expect from the person with a disability; (b) threat to security or threat to view the works as fair when someone is perceived to suffer from an undesirable fate; (c) fear of becoming disabled or feelings of personal vulnerability; (d) guilt about one's lack of disability; (e) view the disability as tragic; and (f) a general aversion to weakness. These emotions and motivations tend to be unpleasant and lead to discomfort when interacting, or contemplating the possibility of interaction, with a person with a disability. Discomfort is compounded by self-consciousness resulting from curiosity and the urge to stare.

Gething (1992) explained that discomfort in interaction and reluctance to associate were linked with level of prior contact with people with disabilities. People with low level of interaction are more likely to experience discomfort with reaction expressed in terms of physiological as well as psychological responses. People without disabilities with low levels of interaction or prior contact report have reported greater stress during interactions with people with disabilities. The person with a disability senses this uneasiness and becomes tense. Interaction between the two people is inhibited and characterized by uncertainty.

The 20 items on the IDP are divided into six factors. However, these factors do not appear in any specific order of appearance or importance. Factor 1 is discomfort in social interaction. Factor 2 is coping and succumbing to a framework. Factor 3 is perceived level of information. Factor 4 is vulnerability. Factor 5 is Coping. Factor 6 is vulnerability. The sample consisted of 87 people (37 men and 50 women) ranging in age between 18 and 63 with a mean age in the 30-39 year old age group. Participants were contacted on three occasions. First the respondents completed the Facts on Disability

Scale (FAD), the Attitudes Toward Disabled Persons Scale (ATDP), the Living with a Disability Scale (LWAD), and the IDP Scale. The second and third contact participants only completed the IDP Scale.

Gething reported the IDP correlated highly with other measures of attitudes and interactions. The correlation coefficients are: the ATDP -0.37, the FAD -0.27, the LWAD 0.42, and the social desirability scale -0.09. The FAD was calculated using $p<0.01$ and the rest were calculated using $p<0.05$. The researcher reports strong and consistent support was provided for the construct validity of the IDP in terms of test-retest reliability and internal consistency. The IDP is shown to be successful in assessing attitudes and interaction change occurring as a result of an intervention program.

One sensitive index of attitudes is the language behavior of the person without a disability. Gouvier, Coon, Todd, and Fuller (1994) examined the actual language behavior directed towards individuals with and without visible disabilities. Four experimenters (2 male and 2 female) requested directions to a bookstore from male and female college students on a university campus. One hundred sixty undergraduates (80 male and 80 female) served as the subjects. The two examiners approached the subjects and asked directions to the bookstore. Each examiner portrayed a student with a disability using a wheelchair and a student without a disability. Responses were recorded and later transcribed for total word count, frequency counts of locator words, and frequency counts of interrogative statements. There were three independent variables, first the sex of the examiner, second the sex of the respondent, and lastly the approach condition of walking versus using a wheelchair.

Results were measured using a 2x2x2 analysis of variance. The analysis of the word count revealed significant effects for the approach condition. Respondents talked more when the examiners were in a wheelchair. A two-way interaction between the respondent's gender and approach showed a more prominent effect among females than males. The analysis of frequency of word count revealed significant effects for the approach condition. Respondents used more locator words when addressing the examiner in a wheelchair. The analysis of frequency counts of interrogatives revealed a subject gender by approach condition interaction which showed females respondents asked more questions and males asked less when approached by a person in a wheelchair.

The researchers reported reliable differences in the verbal behavior directed toward people with and without a disability. Speech directed toward people with a disability was more redundant and concrete than speech directed to people without disabilities. Also, females were more likely to speak in a caring motherly tone to people with disabilities.

Interaction research is primarily conducted among students in high school and college settings (Fichten & Amsel, 1988; Fichten, Amsel, Bourdon, & Creti, 1987; Fichten, Robillard, Tagalakis, & Amsel, 1991). Attitudes and values shape the way professionals behave in work situations. Teachers and faculty members can perform a significant role in making academia a success experience for students with disabilities. However, their ability to do this is impacted by their attitude and interaction they possess toward students with disabilities.

Grenot-Scheyher (1994) examined the nature of interactions between friends with and without disabilities and between acquaintances with and without disabilities among children with severe disabilities ages 5-10.3. The study involved twenty children with severe disabilities and eleven children without disabilities. The subjects were divided into two groups, children with severe disabilities and their friends without disabilities and children with severe disabilities and their acquaintances without disabilities. The two groups were videotaped in a variety of play situations over two fifteen minute periods. The researcher reported the two groups did not differ in developmental level, age, functional movement, or social competence. In terms of interactions, several differences were noted yet none were found to be significant.

Following the same line, Staub and Hunt (1993) also examined the social interactions, yet their study involved high school students who served as peer tutors of classmates having severe disabilities. Eight high school students volunteered to serve as peer tutors in a classroom for student with severe disabilities. The students were randomly assigned to interact with and serve as a partner for four classmates with mental retardation or mental retardation accompanied by a physical disability. Only one student in each tutorial pair received any type of social interaction training. An analysis of data revealed that there was an increase in the frequency of initiations of interactions directed from the student without disabilities toward the student with severe disabilities. It was also noted that there was also an increase in the proportion of interactions that were social in nature with a decrease in the frequency of task-related interactions. The students with severe disabilities had a positive increase in their social behaviors in academic and nonacademic settings.

Hemstetter, Peck, and Giangreco (1994) noted that more positive outcomes are associated with more contact between people with and without disabilities. As the contact between students with and without disabilities increases, the student will develop an increase in responsiveness to the needs of other people, valuing the relationship with a person having a severe disability, an increased tolerance with other people, an increase in the development of personal values, an increase appreciation of human diversity, and more positive changes in personal status with their peers.

College and university students with physical disabilities as well as educators view higher education as a means of realizing one's potential, enhancing the chances of finding work, achieving financial security, and becoming more self-supporting and capable of leading a more independent lifestyle. The ADA and similar legislation has fostered laws aimed at enhancing the lives of people with disabilities. The legislation has resulted in improved educational opportunities because discriminatory college entrance requirements have been eliminated and physical accessibility had been improved.

Fichten et al. (1987) investigated the appropriateness and inappropriateness of interactions between college professors and college students with severe disabilities. The study composed of 37 college and university students, 60 professors with previous experience teaching student with disabilities, and 17 professors who did not have any previous experience teaching students with disabilities. The students were recruited through personal contacts by coordinators of student services and by associations for persons with severe disabilities. The students provided the names of professors who had taught them in previous classes. These professors were then contacted and asked to participate.

The mean age of the student was 26 (range = 19-37). 24% of the students used a wheelchair, 24% had a hearing impairment, 18% had a visual impairment, 18% had Cerebral Palsy, and 16% had neuromuscular disabilities. All participants were mailed a three part questionnaire. Section 1, for professors only, addressed the resources presently available at their institution and how interested were they in teaching students with disabilities. Professors responded using a 10 point Likert scale ranging from very interested to very uninterested. Section 2 professors were asked to respond to how comfortable they were having a students with and without disabilities combined in their classes. Again the same 10 point Likert scale was used. Student were asked to rate how comfortable they were with their professors using the same 10 point Likert scale. Section 3 contained twenty-eight interactions gleaned from professional literature on general disability issues, class activities, time issues, personal issues, third person involvement, special considerations and special grading procedures. For each of the 28 situations a variety of behaviors were listed. Using the same 10 point Likert scale professors and student responded to the behaviors. A total of 196 behaviors were included.

The two groups of professors completed the survey. The researchers noted that the number of inexperienced professors was low and that significant differences existed in the ages of experienced (m=43.56) and inexperienced (m=38.19), $t(89)=2.71$, $p<0.01$. The two groups of professors agreed on the types of students they were willing to teach. The most to least preferred in order were: wheelchair users, students with mobility impairments, muscular impairments, visual impairments, Cerebral Palsy, and hearing impairments. The interest scores of the two groups of professors were compared. The differences were not significantly significant on anything except hearing impairments $t(68)=3.53$, $p<0.001$. When measuring comfort level experienced (m=9.18) and inexperienced (m=9.13) did not differ on their comfort level with students without disabilities, inexperienced professors were less comfortable with students with a disability (m=6.67) than experienced professors (m=8.08), $t(91)=2.73$, $p<0.01$. In addition, inexperienced professors were less comfortable with students without disabilities than experienced professors.

The results indicate that professors who had not taught students with disabilities were less comfortable with students with disabilities than experienced professors. The inexperienced professors were also less comfortable with students without disabilities. The researchers report that these findings are similar in that the results of a number of studies show that prolonged contact with people with a disability results in less anxiety.

The limitations of this study include no mention of reliability and validity information for the instrument used, nor was the name of the instrument mentioned. Because this was a preliminary study, there was large number of variables. Another limitation was the sample. The sample size for inexperienced professors was small. There were a large number of professors and students who participated in this study, however, there was no random assignment or selection, thus the sample may not be an accurate reflection of the general population of professors and students with disabilities.

People with low level of interactions with individuals with disabilities are more likely to experience discomfort with reaction expressed in terms of physiological as well as psychological responses. People without disabilities with low levels of interaction or prior contact have reported greater stress during interactions with people with disabilities. This study is important because the person with a disability senses this uneasiness and thus becomes tense. This negative interaction between the two people leaves the two people inhibited and uncertain of one another. This study hopes to demonstrate that increased interaction with a person with a disability can be a positive experience.

Conclusion

A review of the above cited literature suggests that many researchers, in their enthusiasm to assess the reactions of individuals without disabilities to individuals with disabilities in a variety of settings, have overlooked the importance of developing standardized measures which are psychometrically sound. A number of measures have been developed specifically for use in one study, and, for many of these single-use instruments, reliability and or validity assessment have not been reported. In other instances, validation assessment has been restricted to concurrent validity based on demographic variables or personality measures.

There is little empirical research related to the effectiveness of employees knowledge and its effect on employees attitude and interaction with people having a disability. In fact, empirical research is essentially nonexistent in this area.

Although research focusing on social recreation and leisure in the general population is plentiful, research addressing these areas for individuals with disabilities is a recent phenomenon even with the emergence with the IDEA legislation and the ADA legislation. Providing appropriate access to programs requires an understanding of the psychosocial and physiological factors that may influence or affect participation in recreational activities.

A high rate of use exists with local theme parks, governmental parks, and recreation services. In terms of local parks, it has been determined that slightly over seven out of ten people use a park within any given week and that 75% of the population has used theme parks and parks during the past 12 months. Of the population, 51% report using the parks occasionally and 24% of the population report using parks frequently.

Theme parks provide a variety of benefits to the individual, family, and community. Such benefits include: exercise and fitness, relaxation and peace, fun and entertainment, family time, a gathering place for people, community spirit, and a place to go where youth can gather in a safe environment. These benefits make it imperative for employees to maintain a positive attitude towards guests with and without disabilities. If people, with and without disabilities, have a positive experience at a theme park, they will return and if that experience is negative, they will not return. The public view of local recreation and park benefits are said to be primarily people benefits. These people benefits occur at the individual, household, and community level. To a surprising extent, the perception of such benefits transcends age, race, gender, and political affiliation. In this lies the strength of local recreation and park services for the future.

Family recreation programming is being restructured because of changing family structures. Studies show individuals still consider family recreation experiences extremely important. Substituting the word community for family in promoting special events may attract more people as traditional families decline.

In order for families to continue participating in family recreation experiences employers must ensure that all employees can interact comfortably and productively with people who have a disability. Employees who participate in disability awareness training programs can use the experiential exercises to break down fears and prejudices that people without disabilities have toward people with disabilities.

CHAPTER 3
METHODS AND PROCEDURES

Introduction

Chapter 3 presents a review of the methods and procedures that were used in this study. This study was being conducted to determine the effectiveness of a professionally designed disability awareness program to increase employee awareness of individuals with disabilities. Specifically, this study determined the level of knowledge and interactions of employees with guests with disabilities. Secondly, this study determined if increased employee knowledge resulted in a change of interaction with and attitude towards guests with disabilities. The chapter is divided into five parts: description of the null hypotheses, description of the subjects, description of the research instrumentation, description of the procedure, and treatment of the data.

Description of the Null Hypothesis

The research questions for this study are expressed through the following null hypotheses:

Null Hypothesis #1: There is no statistically significant difference in the knowledge level about individuals with disabilities between theme park employees who receive the Disabilities Awareness Package (treatment) and those who do not receive the Disabilities Awareness Package (control).

Null Hypothesis #2: There is no statistically significant difference between the mean scores of the treatment and control groups in employee attitude toward persons with disabilities.

Null Hypothesis #3: There is no statistically significant difference between the mean scores of the treatment and control groups on employees' interaction with theme park guests who are disabled.

Description of the Subjects

The subjects in this study were employees from Busch Gardens, Tampa Bay, an entity of Busch Entertainment Corporation. Potential participants were sought by the Human Resources Department of Busch Gardens, Tampa Bay. The Human Resources Department is responsible for coordinating all employee development and training workshops. Employees with direct contact with guests would be participants in this study.

Employees of Busch Gardens, Tampa Bay, were given the opportunity to participate in this study which included a pretest and a posttest, two recorded observations, and a possible workshop. From the group of employees that agreed to participate in the Disabilities Awareness Workshop, forty employees would be randomly selected and divided into two equal groups by way of the table of random numbers. Should any subject have declined to participate in this study, an alternate would be randomly selected to replace the subject who withdrew from the study, however no employee withdrew from this study.

In return for the cooperation of Busch Gardens, this researcher agreed to do a similar intervention with the control group approximately one month following the study if the results indicated significant improvement in knowledge, attitude, and interaction.

Participants were randomly divided into the two groups by gender in order to assure there is not a bias created by gender. Gender was the only factor taken into account because Gouvier et al. (1994) indicated that a difference in attitude and interaction occurred between males and females..

Description of the Research Instrumentation

For the purpose of this study, a pretest-posttest format was used to assess the levels of knowledge, attitude toward, and interaction with persons with disabilities. The measuring instruments were the Facts about Disability (FAD) Scale (Gething & Wheeler, 1992), the Interaction with Disabled Persons (IDP) Scale (Gething, 1991), and the Observations of Employees based on Gouvier, Coon, Todd, and Fuller Scale (1994).

Measurement of Knowledge--Facts about Disability (FAD) Scale

This instrument consisted of a series of twelve true false statements about disabling conditions. These statements were drawn from information published by the Australian Bureau of Statistics (1989), an organization representing persons with disabilities. The FAD had been administered throughout Australia, Canada, and the United States. The instrument is designed to measure level of accurate information about disabling conditions. Respondents are required to indicate whether each statement is true or false. A higher score indicates a higher level of accuracy of knowledge.

The FAD was assessed for face value and content validity, for which a significant Person's product moment correlation emerged: $r(86)=-0.27$, $p=<.01$ (Gething & Wheeler, 1992). Internal consistency as indicated by Cronbach's coefficient alpha is only moderate in size. A coefficient of 0.49 was obtained for a sample of 227 people, indicating the FAD had moderate item homogeneity. Similar findings had been reported for other measures of accuracy of information.

Measurement of Attitude--Interaction with Disabled Persons(IDP) Scale

While the title of the questionnaire states interaction, the 20-item questionnaire was designed to tap reactions that are posited to underlie negative attitudes towards persons with disabilities. It was based on a theoretical position that negative attitudes reflect strangeness or lack of familiarity that creates uncertainty or anxiety within a person (Simpson, 1980). The IDP Scale measures discomfort experienced in social interaction or at the prospect of interacting with a person with a disability (Gething, 1991). Test-retest reliability was assessed on eight occasions, with coefficients ranging between +0.51 for a one year period to +0.82 over a two week period. Internal consistency was assessed on 15 occasions, with Cronbach's alpha coefficient varying between +0.74 to +0.86. Results for both these forms of reliability compared favorably with those reported for other measures of attitudes toward people with disabilities (Antonak & Livneh, 1988). Construct validity assessments indicate the IDP Scale had significant associations with variables which make up its theorized nomological network (level of prior close contact, other measures of attitudes towards persons with disabilities, and level of accurate information possessed about disabling conditions). The instrument had been found to be sensitive to differences between groups and to measuring attitude change.

Measurement of Interaction--Observations of Employees based on the Gouvier, Coon, Todd, and Fuller Scale

Employees were observed in the natural work setting interacting with a guest who had a disability and by a guest who did not have a disability. Two observations which included audio recordings were taken on each of the 40 subjects. Each observation and recording lasted no longer than three minutes. Each subject was observed and recorded interacting with a guest with a disability and a guest without a disability.

Each role player approached the employee and asked the employee directions toward Jeepers Creepers (a store in the front of Busch Gardens where guests can rent equipment for people with disabilities). Each employee was recorded twice within a two hour period from the same work station to ensure the same distance to Jeepers Creepers. Random selection determined if the employee was approached first by a person with a disability or by a person without a disability. The employee was asked directions to Jeepers Creepers by two shoppers (role players), one person with a visible disability and one by a person without a disability. Recordings were transcribed for analysis involving calculation of total word counts, frequency of locator works, frequency counts of interrogative statements, distance to Jeepers Creepers, was a map used to give directions, and did the employee have knowledge of the location of Jeepers Creepers. The independent variables were the gender of the experimenter, the sex of the employee, and the approach condition of the experimenter. A 2x2x2x2x2 Analysis of Variance (ANOVA) was used to study the variables.

Description of the Procedures

Research Design

The dependent variables being measured were (a) the knowledge base of persons with disabilities, (b) attitudes toward persons with disabilities, and (c) the interaction level with persons with disabilities. The independent variable was the employee disability awareness training module. Below is a table depicting the schematic representation of the experimental design used in this study.

Table 3-1. Schematic Representation of this Experimental Design

R	O1	X	O2	Obs	(treatment)
R	O1		O2	Obs	(control)

R= Random Assignment within strata
O1= Pretest Measurement
O2= Posttest Measurement
X= Treatment
Obs= Observation

Setting

The measurement activities and employee trainings took place in Tampa Bay, Florida. One treatment and one control group was used. Those individuals in the treatment group received a disabilities awareness workshop. The control group did not receive any specific intervention.

The workshop took place in a relaxed atmosphere. No time was allowed for individual questions following the session outside of the scheduled question and answer periods because information not shared by all would threaten the validity of the posttest measures. The workshop was conducted by the researcher for the treatment group.

The workshop took place over a three day period in the education classrooms at Busch Gardens, Tampa Bay. Employees in the treatment group attended a one-day workshop. The treatment group was administered a pretest prior to the start of the first session, as did the control group. At the conclusion of the intervention (disabilities awareness workshop) the treatment group received the posttest. The control was reconvened and administered their posttest the day after the treatment group received their workshop.

Within two weeks after the posttest all participants were observed interacting with an individual with a disability. Conversations were recorded and verbal interaction patterns were analyzed. The dependent variables of total word counts, frequency of interrogatives, use of locator words, distance, map usage, and knowledge of location were analyzed as per the Gouvier, Coon, Todd, and Fuller Scale (1994).

The Disabilities Awareness Workshop

The workshop was divided into two main sections (Appendix). Section I covered general issues about disability that are then expanded in section II related to specific disability areas. Themes included: an explanation of the distinction among impairment, disability, and handicap; origins of attitudes and their effects of the quality of life and opportunities, strategies for people with and without a disability for appropriate behaviors during interactions; common myths and their realities; double disability, as defined by the business industry, (e.g., women, members of ethnic minority groups, and people living in isolated areas who experience additional disadvantage in addition to the disability); and issues associated with community access and service provision. Section II covered the following areas: learning disabilities, mental retardation, severe and/or multiple disabilities, physical and special health problems, visual impairments, Down Syndrome, emotional disturbance, Cerebral Palsy, speech and language disorders, autism and pervasive developmental disorder, epilepsy, and attention deficit disorder. Material in each of these areas took a holistic view of the disability, emphasized implications for the individual, family, and community, in addition to a discussion of the medical features of the disability and educational implications.

Emphasis was placed on people with and without a disability working together to create a sense of sharing and cooperation. Strategies were implemented to avoid an "us versus them" situation. Strategies included small group exercises, simulations, and large-group discussions of issues.

Instrument Administration

Pretest-posttest measures were administered to each group, treatment and control. The measures were implemented by the session leader (researcher) with time given for completion and submission. The initial pretests for each group were during a one day testing session prior to the Disability Awareness Workshop. The employees in the control group attended one of two pretest sessions in the morning. The employees in the treatment group attended one of two pretest sessions in the afternoon. Posttest measures for both groups were taken the day after the workshop, again in two separate sessions. Because the responses were fixed-response, there was no need for inter-rater reliability.

Treatment of the Data

Descriptive and inferential statistics were employed in this study. All data analysis utilized the integrated computerized program of Statistical Analysis Software (SAS) to generate summative and inferential information. Graphical representation of the data is used to help organize and interpret the findings.

Descriptive statistics were obtained including the mean and the standard deviation of both the control and treatment groups. The data were analyzed by an analysis of co-variance (ANCOVA). All inferential statistics were analyzed using a significance level of 0.05. The two between group subject factors are the disability awareness workshop and the sex of the participant.

The pretest measurement in the design served as the covariate to remove the effect of prior knowledge that employees held regarding issues pertinent to persons with disabilities. The effects of the ANCOVA resulted in an adjusted posttest score that was indicative of the true impact of the disabilities awareness workshop as a training intervention, as opposed to any preexisting knowledge that subjects may have had before the intervention. The covariate removed the systematic differences among subjects from the within groups error term.

The use of an ANCOVA is a more powerful statistical tool than the analysis of variance statistical tool because of the removal of some of the variability within the groups, thus the total error variance is reduced. The design requirement of the fixed-effects ANCOVA were satisfied in this study because there was a covariate measured prior to the implementation of the treatment and control groups and the subjects were randomly assigned to either the treatment or control groups (Shavelson, 1988).

The recordings of the observations were analyzed using a repeated measures ANOVA. The between subject variables were age, gender, department of the respondent, and treatment group. The within subject independent variable was whether the guest has a disability or not. Within two weeks after the posttest all participants were observed interacting with individuals with apparent disabilities. Conversations were recorded and verbal interaction patterns were analyzed. The dependent variables are total word counts, frequency of interrogatives, use of locator words, distance, use of a map, and knowledge of the location of Jeepers Creepers.

Summary

In Chapter 3, the methods and procedures involved in the development and effectiveness assessment of a training program designed to enhance the knowledge base of disability issues, interaction levels, and attitudes of employees towards persons with disabilities have been described.

The efficacy of the training program was measured through the implementation of an empirical study that included employees who have direct contact with persons who have a disability. Employees in the experimental group attended a one day workshop designed to give information regarding disability awareness issues. The subjects completed instruments designed to measure their knowledge of disability issues as well as their interaction levels and attitudes toward persons with disabilities. Following the workshop, the instruments were re-administered and scored statistically to evaluate the retention of knowledge of disability issues.

Employees in the control group also completed the instrument designed to measure their knowledge, interaction, and attitude toward persons with disabilities. The instrument was re-administered following the time frame necessary for administration of the training to the treatment group and statistically evaluated to determine any change.

The analysis of covariance (ANCOVA) as well as the analysis of variance (ANOVA) was selected as the appropriate statistical process for analyzing data necessary to answer research questions posed in this study. Chapter 4 contains the results of analyses conducted on the major research questions.

CHAPTER 4
RESULTS

In Chapter 4, the results of the effectiveness of the Disability Awareness Workshop on theme park employees' knowledge, attitude, and interaction toward guests with disabilities are presented. The chapter is organized to present the findings associated with each of the questions presented in Chapter 1, which were formulated into null hypotheses as described in Chapter 3. In all of these sections, the results associated with the quantitative descriptive and inferential analyses are discussed. All numerical analysis utilized the latest version of the Statistical Analysis Software (SAS) with a .05 level of significance selected as the criterion for rejecting the null hypotheses.

Summary of Demographic Information

Table 4-1 contains descriptive analysis of the demographics of the final sample of 40 employees of Busch Gardens that were randomly selected as participants in the research intervention. Of the total number, 77% of subjects who were included in the final sample were female, while 23% were male. Five participants were not selected to participate in the research project because they were employed behind the scenes and did not have any direct contact with guests.

Employees from eight departments participated in this study: Games (1), Merchandise (10), Conservation (10), Food Service (7), Marketing (5), Public Relations (2), Guest Relations (3), and Operations (2). Games and Merchandise are considered to be in the same department as with Marketing and Public Relations. Games and Merchandise and Food Service hire the greatest number of employees.

Table 4-1. Demographics of Final Sample: Data Reported is Actual Subjects by Group

Gender T/C	T/C		Department T/C
Males	Females	Conservation	2/8
5/3	15/17	Food Service	3/4
		Games	0/1
		Guest Relations	2/1
		Marketing	4/1
		Merchandise	5/5
		Public Relations	2/0
		Operations	2/0

T= treatment
C= control

Table 4-2. Demographics of Final Sample: Age by Group

Age

Age	Treatment	Control
19 or less	2	1
20-29	7	12
30-39	4	3
40-49	5	3
50-59	1	1
60 or older	1	0

Twenty-two of the employees were under age 29. The next largest age group was between ages 40-49. Approximately one half of Busch Gardens' employees are high school and college students as well as seasonal workers. This would explain the high number of younger employees. A request was made to Busch Gardens for a breakdown of employees by age, gender, and department but this request was not received. Busch

Gardens did not have this information available due to the weekly change in the demographics of the employees.

Knowledge

The Facts on Disability Scale (FAD) measured knowledge. The FAD score was based on a 12 item true-false instrument. The final score was obtained by the following: two points for each correct answer, one point for each incorrect answer, sum up the points and multiple by 4.2. The total possible score on the Facts with Disability Scale was 100. A higher score represented a high degree of knowledge of issues pertinent to people with disabilities. Table 4-3 shows a breakdown in mean scores by gender and group.

Table 4-3. Mean Score of Knowledge (FAD) by Gender and Group

	TREATMENT			CONTROL		
	Pretest	Posttest	Change in Score	Pretest	Posttest	Change in Score
Males (n=8)	92.32	87.36	-4.96	88.20	79.80	-8.34
Females (n=32)	81.20	86.80	+5.6	84.24	80.29	-3.95

The largest increase in knowledge scores was evident for females in the treatment group (+5.6 points). Males in the treatment group evidenced a decrease in knowledge (-4.96 points). The posttest scores of both males (79.80) and females (80.29) in the control group were lower than their pretest scores of 88.20 and 84.24 respectively.

Research Question #1

Research question 1, the primary research question in this research study, addressed whether employees who received a Disability Awareness Workshop (treatment group) would demonstrate a greater knowledge base in disability issues and legislation after attending a professionally designed workshop than employees who did not receive a Disability Awareness Workshop (control group). This question was addressed through the following null hypothesis: There is no statistically significant difference in the knowledge level about individuals with disabilities between theme park employees who receive the Disability Awareness Workshop (treatment group) and those who do not receive the Disability Awareness Workshop (control group).

Table 4-4 contains means, standard deviation, and change scores of the Facts About Disability Scale (FAD). These scores are reported for the treatment and control groups. Employees in the control group, who did not receive the Disability Awareness Workshop, scored higher on the pretest instrument (84.84) than those subjects in the treatment group (81.48). On the posttest measurement, subjects in the treatment group, who received the Disability Awareness Workshop, scored higher (86.94) than those who did not receive the Disability Awareness Workshop (80.22). Additionally, the mean FAD score for the treatment group evidenced a greater increase than the mean FAD for the control group.

As indicated by this data, employees in the control group, those who did not receive the Disability Awareness Workshop, scored higher on the pretest instrument (84.84) than those subjects in the treatment group (81.48). A higher score represents a high degree of knowledge of issues pertinent to people with disabilities. However, on the

Table 4-4. Means, Standard Deviation, and Change Scores of the FAD for Treatment and Control Groups

	Pretest		Posttest		
	Mean	SD	Mean	SD	Change in Score
treatment (n=20)	81.48	4.98	86.94	4.98	+5.46
control (n=20)	84.84	5.02	80.22	5.08	-4.62

posttest instrument, subjects in the treatment group, who received the Disability Awareness Workshop, scored higher (86.94) than those who did not receive the Disability Awareness Workshop (80.22). Consistent with this finding, is the greater increase from mean subject scores from the pretest to posttest in the treatment group.

To identify whether a statistical difference could be identified between the means of the treatment and control groups, an analysis of covariance (ANCOVA) statistical methodology was utilized. Table 4-5 depicts the empirical results of this analysis.

Table 4-5. Results of Analysis of Covariance for Employees Knowledge of Issues Related to People with Disabilities

Source of Variation	Sum of Squares	df	Mean Square	F
Covariate (pretest)	50.57	1	50.57	2.01
Effect (Age)	26.08	1	26.08	1.04
Effect (Sex)	6.98	1	6.98	0.28
Effect (Department)	356.03	7	50.86	2.02
Effect (Treatment)	495.53	1	495.53	19.70*
Explained (model)	840.95	11	76.45	3.04*
Residual (error)	704.37	28		

* significant at 0.05

The null hypothesis for primary research question one was rejected, indicating that there was a statistically significant difference between the mean scores of the treatment group and the control group on knowledge of issues related to disability and disability legislation (F(1,28)=19.70; p<.05). Although the mean score for the treatment group increased and the mean score for the control group decreased, there was a statistically significant difference found based upon whether the subjects received the Disability Awareness Workshop.

Interestingly, although there was a significant statistical difference identified between mean scores based upon group, there was no significance identified based upon the covariate, or prior knowledge as measured by the pretest (F(1,28)=2.01;p>0.05). The effect of the pretest, which served as the covariate, did not have an impact upon the posttest knowledge scores whereas the Disability Awareness Workshop did have an effect upon the posttest scores. There was a significant statistical difference identified on the explained effect. The explained effect takes into account all of the other effects.

Attitude

The attitude score was obtained by using the Interaction With Disabled Persons Scale (IDP). The attitude score was measured by a decrease in score on the IDP. This score was based on a 20 item 6 point Likert-type scale. The final score was obtained by adding the assigned points of their answers. A lower score indicated a more positive attitude an employee may have toward a guest with a disability and the higher the score a more negative attitude an employee may have toward a guest with a disability.

Table 4-6. Mean Score of Attitude by Gender and Group

	Treatment			Control		
Group	Pretest	Posttest	Change	Pretest	Posttest	Change
males (n=8)	58.40	54.00	-4.40	66.66	63.00	-3.66
females (n=32)	72.40	64.13	-8.27	68.52	67.41	-1.11

Table 4-6 contains mean scores of attitude by gender and group. The IDP measures attitude. Therefore, attitude scores were measured by the decrease in points from the pretest to the posttest. The greatest decreases in attitude were evidenced by females (-8.27) and males (-4.4) in the treatment group. Females in the control group received the lowest point decrease (-1.11). However, in both groups (treatment and control) the mean score of females was higher than the mean scores of males on the pretest and posttest. The small number of subjects in the treatment and control groups, especially the male group, must be considered in interpreting these results and generalizing these findings outside of this study.

Research Question 2

Research question 2, one of the primary research question in this research study, addressed whether employees in the treatment groups (receiving a Disability Awareness Workshop) would change their attitude regarding persons with disabilities after attending a professionally designed workshop more than employees in a control group (did not receive a Disability Awareness Workshop). This question was addressed through the following null hypothesis: There is no statistically significant difference between the mean scores of the treatment and control groups in employee attitude toward persons with disabilities.

In order to answer this question, descriptive statistics were calculated and analyzed and are depicted in table 4-7. Employees in the treatment group, who received the Disability Awareness Workshop, scored higher on the pretest instrument (mean =68.90, SD=12.69) than those employees in the control group (mean=68.25, SD=12.94). Subjects in both intervention groups scored lower on the posttest than on the pretest (Treatment,

-7.34 and Control, -1.5), indicating a greater understanding and more positive attitude toward people with disabilities. Consistent with this finding is the greater decrease of mean subject scores from the pretest to the posttest for the treatment group.

Table 4-7. Mean Scores of Attitude (IDP) for Study Participants by Group

	Pretest		Posttest		
Group	Mean	SD	Mean	SD	Change in Score
Treatment (n=20)	68.90	12.69	61.60	9.17	-7.34
Control (n=20)	68.25	12.94	66.75	14.67	-1.5

To identify whether a statistical difference could be identified between the means of the treatment and control groups, an analysis of covariance (ANCOVA) statistical methodology was utilized. Table 4-8 depicts the empirical results of this analysis.

Table 4-8. Results of Analysis of Covariance for Employees Attitude Toward People with Disabilities.

Source of Variation	Sum of Squares	df	Mean Square	F
Covariate (pretest)	2379.12	1	2379.12	38.24*
Effect (Age)	6.86	1	6.86	0.11
Effect (Sex)	40.06	1	40.06	0.64
Effect (Department)	237.53	7	33.94	0.55
Effect (Treatment)	273.48	1	273.48	4.40*
Explained (model)	4215.66	11	383.24	6.16*
Residual (error)	1742.11	28	62.28	

* significant at 0.05

The null hypothesis for primary research question two was rejected, indicating that there was a statistically significant difference between the mean scores of the treatment group and the control group on employees' change in attitude toward people with disabilities (F(1,28)=4.4;p<.05). Although the mean score for the treatment group increased and the mean score for the control group decreased, a statistically significant difference was found based upon whether the subjects received the Disability Awareness Workshop.

There was a significant statistical difference identified between mean scores based upon group, there was also a significance identified based upon the covariate, or prior attitude level as measured by the pretest (F(1,28)=38.24;p<0.05).

Interaction

Each employee in the study was stopped by a guest with a visible disability and by a guest without a disability. The employees were approached by each guest and were asked "Would you give me directions to Jeepers Creepers?" The guest made sure the employee was in the same location (or job station) each time the question was posed to ensure that distance did not affect the directions given. The employees were rated on the number of words used, the number of locator words used, the number of interrogatives used, the distance in yards from the point of question to location of Jeepers Creepers, if a map was used, and knowledge of the location of Jeepers Creepers.

Table 4-9 contains mean scores of the interaction by gender and by group. When the interaction of employees with guests who have a disability was examined, males in the control group used the greatest number of words in conversation (141.33); females in the control group used the least (97.23). Males in the control group used the greatest number of locator words (4.66); females in the control group used the least number of locator words (3.05). Males in the treatment group used the highest number of interrogatives (1.0); males in the control group used the least (0.00). Males (1.80) and females (1.80) in the treatment group did not appear to differ with respect to the use of a map when giving directions to a person with a disability. Males in the control group had a lower score (1.66) than females in the control group (1.76). This indicates that although neither group used a map consistently; males in the control group used a map more often than anyone else. Overall, males in the control group did not know the location of Jeepers Creepers (1.33) while both males and females in the treatment group knew the location of Jeepers Creepers (1.0). A 1.0 meant a map was used to give directions and a 2.0 indicated a map was not used to give directions. A 1.0 meant the employee knew the location of Jeepers Creepers and a 2.0 indicated that the employee did not know the location of Jeepers Creepers.

Table 4-9. Mean Scores of Interaction by Gender and Group

	Treatment		Control	
	Male	Female	Male	Female
a-number of words	119.50	107.26	141.33	97.23
b-number of words	78.50	91.66	93.33	86.64
a-number of locator words	3.25	3.86	4.66	3.05
b-number of locator words	3.25	2.93	3.66	3.35
a-number of interrogatives	1.00	0.93	0.00	0.47
b-number of interrogatives	0.25	0.60	0.00	0.76
a-distance to Jeepers Creepers in yards	922.00	572.33	490.00	573.23
b-distance to Jeepers Creepers in yards	922.50	560.33	511.66	597.35
a-used a map	1.80	1.80	1.66	1.76
b-used a map	1.75	1.80	1.66	1.88
a-knew location of Jeepers Creepers	1.00	1.06	1.33	1.23
b-knew location of Jeepers Creepers	1.00	1.00	1.33	1.41

a= interaction with a person with a disability
b= interaction with a person without a disability

When the interaction of employees with guests who do not have a disability was examined, males in the control group used the greatest number of words in conversation (93.33); males in the treatment group used the least (78.50). Males in the control group used the greatest number of locator words (3.66); females in the treatment group used the least number of locator words (2.93). Females in the control group used the most interrogatives (0.76); males in the control group used the least (0.00). Females in the control group used a map less often when giving directions to a person with a disability (1.88); males in the control group used the map most often (1.66). Overall, females in the control group did not know the location of Jeepers Creepers (1.41) whereas males and females in the treatment group knew the location of Jeepers Creepers (1.0).

Research Question #3

Research question 3, one of the primary research question in this research study, addressed whether employees in the treatment groups (receiving a disability awareness workshop) change their interaction pattern with persons with disabilities after attending a professionally designed workshop than employees in a control group (did not receive a disability awareness workshop). This question was addressed through the following null hypothesis: There is no statistically significant difference between the mean scores of the treatment and control groups on employees' interaction with theme park guests who are disabled.

In order to answer this question, statistics were calculated and analyzed and are depicted in Tables 4-10 through 4-16. Table 4-10 illustrates the results of analysis of variance for employees' interaction toward people with disabilities, specifically the total number of words spoken by the employee. The null hypothesis for primary research question three was not rejected. This indicates that there was not a statistical significance between subjects or within subjects on the mean scores of the treatment group and the control group on employees' interaction with theme park guests who have a disability when examining the number of words spoken to a guest with a disability and a guest without a disability. This finding is positive because employees are expected to treat each guest the same.

Table 4-10. Number of Words Spoken--Results of Analysis of Variance for Employees' Interaction with People with Disabilities

Source of Variation	Sum of Squares	df	Mean Square	F
Between Subjects				
Age	4207.72	1	4207.72	0.72
Sex	10815.60	1	10815.60	1.86
Department	87443.98	7	12491.99	2.15
Treatment	574.29	1	574.29	0.10
Error	162773.12	28	5813.32	
Within Subjects				
Disability	986.42	1	986.42	0.26
Disability*Age	34.15	1	34.15	0.01
Disability*Sex	1231.35	1	1231.35	0.33
DisabilityDept	8833.83	7	1261.97	0.33
Disability*Trt	1360.91	1	1360.91	0.36
Error Word	106021.75	28	3786.49	

Table 4-11 illustrates the results of analysis of variance for employees' interaction with people with disabilities, specifically the number of locator words used. The null hypothesis for primary research question three was not rejected. This indicates that there was not a statistical significance between subjects or within subjects on the mean scores of the treatment group and the control group on employees' interaction with theme park guests who have a disability when examining the number of locator words used to give directions to a guest with a disability and a guest without a disability. This finding is positive because employees are expected to treat each guest in the same manner.

Table 4-11. Number of Locator Words Used--results of Analysis of Variance for Employees' Interaction with People with Disabilities

Source of Variation	Sum of Squares	df	Mean Square	F
Between Subjects				
Age	7.98	1	7.98	0.53
Sex	1.35	1	1.35	0.09
Department	65.69	7	9.38	0.63
Treatment	0.49	1	0.49	0.03
Error	417.94	28	14.92	
Within Subjects				
Disability	0.31	1	0.31	0.08
Disability*Age	0.64	1	0.64	0.16
Disability*Sex	2.16	1	2.16	0.53
Disability*Dept	19.44	7	2.77	0.68
Disability*Trt	3.16	1	3.16	0.77
Error Loc	114.60	28	4.09	

Table 4-12 illustrates the results of analysis of variance for employees' interaction with people with disabilities, specifically the number of interrogatives used. The null hypothesis for primary research question three was rejected. This indicates that there was a statistical significance between subjects on the mean scores of the treatment group and the control group on employees' interaction with theme park guests who have a disability ($F(7,28)=4.46$; $p<0.05$) when examining the number of interrogatives used with a guest with a disability and a guest without a disability. This finding was positive. The treatment group was directed to ask for understanding when interacting with guests.

The mean scores between the two groups is illustrated in Table 4-13.

The mean scores between the two groups is illustrated in Table 4-13.

Table 4-12. Number of Interrogatives Used--Results of Analysis of Variance for Employees' Interaction with People with Disabilities

Source of Variation	Sum of Squares	df	Mean Square	F
Between Subjects				
Age	0.39	1	0.39	0.02
Sex	0.12	1	0.12	0.06
Department	37.96	7	5.42	2.58*
Treatment	2.52	1	2.52	1.20
Error	58.91	28	2.10	
Within Subjects				
Disability	0.38	1	0.38	0.47
Disability*Age	0.26	1	0.26	0.32
Disability*Sex	0.31	1	0.31	0.04
Disability*Dept	12.89	7	1.84	2.23
Disability*Trt	3.68	1	3.68	4.46*
Error Inter	23.12	28		

Table 4-13. Mean Scores by Group on Interrogatives

	Treatment Group	Control Group
Person with a Disability	0.94	0.04
Person without a Disability	0.52	0.65

Table 4-14 illustrates the results of analysis of variance for employees' interaction with people with disabilities, specifically the distance from where the question was asked to the location of Jeepers Creepers (as measured in yards). The null hypothesis for primary research question three was not rejected. However, there was a statistical significance between subjects on the mean for sex (F(1,28)=5.66;p<0.05) and department (F(7,28)=4.94;p<0.05) on employees' interaction with theme park guests when examining the distance from where the question was asked (Would you give me directions to Jeepers

Creepers?) and the location of Jeepers as measured in yards. There was no statistical difference within subjects on the mean scores of the treatment and control groups. Again, this finding was positive. There should not have been any difference between the two groups.

Table 4-14. Distance from Question to Jeepers Creepers--Results of Analysis of Variance for Employees' Interaction with People with Disabilities

Source of Variation	Sum of Squares	df	Mean Square	F
Between Subjects				
Age	212777.89	1	212777.89	1.92
Sex	628276.70	1	628276.70	5.66*
Department	3837401.86	7	5478200.26	4.94*
Treatment	1854.53	1	1854.53	0.02
Error	3108323.74	28	111011.56	
Within Subjects				
Disability	212.44	1	212.44	0.01
Disability*Age	18.24	1	18.24	0.00
Disability*Sex	12.69	1	12.69	0.00
Disability*Dept	102494.98	7	14642.14	0.69
Disability*Trt	337.01	1	337.01	0.02
Error Dist	593610.12	28	21200.36	

Table 4-15 illustrates the results of analysis of variance for employees' interaction with people with disabilities, specifically whether the employee used a map when giving directions. The null hypothesis for primary research question three was not rejected. This indicates that there was not a statistical significance between subjects or within subjects on the mean scores of the treatment group and the control group on employees' interaction with theme park guests who have a disability when examining whether or not the employee used a map to give directions to a guest with a disability and a guest without a disability. This finding was positive. There should not have been a difference between the two groups.

Table 4-15. Map Used When Giving Directions--Results of Analysis of Variance for Employees' Interaction with People with Disabilities

Source of Variation	Sum of Squares	df	Mean Square	F
Between Subjects				
Age	0.23	1	0.23	0.95
Sex	0.32	1	0.32	1.31
Department	1.61	7	0.23	0.93
Treatment	0.00	1	0.00	0.02
Error	6.96	28	0.24	
Within Subjects				
Distance	0.00	1	0.00	0.06
Distance*Age	0.01	1	0.01	0.10
Disability*Sex	0.05	1	0.05	0.43
Disability*Dept	0.31	7	0.04	0.36
Disability*Trt	0.00	1	0.00	0.02
Error Map	3.46	28	0.12	

Table 4-16 illustrates the results of analysis of variance for employees' interaction with people with disabilities, specifically whether the employee knew the location of Jeepers Creepers. The null hypothesis for primary research question three was not rejected. However, there was a statistical significance between subjects on the age ($F(1,28)=4.44$; $p<0.05$) mean scores on employees' interaction with theme park guests when examining whether or not the employee knew the location of Jeepers Creepers. There was no statistical significance on the within subjects mean scores of the treatment group and the control group when examining whether or not the employee knew the location of Jeepers Creepers.

Table 4-16. Knew Location of Jeepers CreepersResults of Analysis of Variance for Employees' Interaction with People with Disabilities

Source of Variation	Sum of Squares	df	Mean Square	F
Between Subjects				
Age	0.79	1	0.79	4.44*
Sex	0.13	1	0.13	0.77
Department	1.02	7	0.14	0.81
Treatment	0.49	1	0.49	2.76
Error	5.03	28	0.17	
Within Subjects				
Disability	0.03	1	0.03	0.42
Disability*Age	0.00	1	0.00	0.00
Disability*Sex	0.16	1	0.16	0.22
Disability*Dept	0.66	7	0.09	1.30
Disability*Trt	0.14	1	0.14	1.94
Error Know	2.03	28	0.07	

Summary

The results associated with the effectiveness of a Disability Awareness Workshop on employee knowledge of , attitude toward, and interaction with guests with disabilities were presented in Chapter 4. Inferential statistics were computed to ascertain whether there was any difference in the knowledge level, attitude level, and interaction style of the treatment and control groups.

There was a statistical difference between the treatment and control groups in the following areas: in the knowledge level of guests with disabilities, attitude toward guests with disabilities, and interaction patterns toward guests with disabilities. This difference was found significant at the 0.05 confidence level and was measured by the analysis of covariance (ANCOVA) and the analysis of variance (ANOVA) methodologies.

The final chapter, Chapter 5, will contain a discussion related to these findings and will include the qualitative information that was generated by respondents through open ended questions, observations, and a post-workshop evaluation form. Interpretation and explanation will accompany this discussion and will serve as part of the foundation for the recommendations for future research section that is at the conclusion of Chapter 5.

CHAPTER 5
DISCUSSION AND IMPLICATIONS

Chapter 5 contains an overview of the purpose and objectives of this study, including reviews of literature, the research questions, and null hypotheses that were the basis for statistical analysis. A review of the instruments and the method used in the research process will facilitate understanding of the discussion in the interpretation of results section. Quantitative data and discussion and interpretation of the results and participants comments during the evaluation process will be presented. This information is important for the recommendations for future research section that is at the conclusion of this chapter.

Review of Study Purpose and Objectives.

The purpose of this study was to evaluate the effects of a Disability Awareness Workshop for employees who have contact with individuals with disabilities. Specifically, the one fundamental question is: Does the use of a Disability Awareness Workshop for employees positively affect employees; knowledge of persons with disabilities and subsequently does this knowledge affect the way the employee interacts with persons with disabilities and their attitude toward individuals with disabilities. Furthermore, through an analysis of data, the effectiveness of the Disability Awareness Workshop was determined. Therefore, the investigator studied the individual effects of four conditions on employees' knowledge, attitude and interaction as it related to individuals with disabilities.

Review of Literature

A review of the literature suggested that many researchers, in their enthusiasm to assess the reactions of individuals without disabilities to individuals with disabilities in a variety of settings, have overlooked the importance of developing standardized measures which are psychometrically sound. A number of measures have been developed specifically for use in one study, and, for many of these single-use instruments, reliability and or validity assessment have not been reported. In other instances, validation assessment has been restricted to concurrent validity based on demographic variables or personality measures.

There is little empirical research related to the effectiveness of employees' knowledge and its effect on employees' attitude and interaction with people having a disability. In fact, empirical research is essentially nonexistent in this area.

Although research focusing on social recreation and leisure in the general population is plentiful, research addressing these areas for individuals with disabilities is a recent phenomenon even with the emergence with the IDEA legislation and the ADA legislation. Providing appropriate access to programs requires an understanding of the psychosocial and physiological factors that may influence or affect participation in recreational activities.

A high rate of use exists with local theme parks, governmental parks, and recreation services. In terms of local parks, it has been determined that slightly over seven out of ten people use a park within any given week and that 75% of the population has used theme parks and parks during the past 12 months. Of the population, 51% report using the parks occasionally and 24% of the population report using parks frequently.

Theme parks provide a variety of benefits to the individual, family, and community. Such benefits include: exercise and fitness, relaxation and peace, fun and entertainment, family time, a gathering place for people, community spirit, and a place to go where youth can gather in a safe environment. These benefits make it imperative for employees to maintain a positive attitude towards guests with and without disabilities. If people, with and without disabilities, have a positive experience at a theme park, they will return and if that experience is negative, they may not return. The public view of local recreation and park benefits are said to be primarily people benefits. These people benefits occur at the individual, household, and community level. To a surprising extent, the perception of such benefits transcends age, race, gender, and political affiliation. In this lies the strength of local recreation and park services for the future.

Family recreation programming is being restructured because of changing family structures. Studies show individuals still consider family recreation experiences extremely important. Substituting the word community for family in promoting special events may attract more people as traditional families decline.

In order for families to continue participating in family recreation experiences employers must ensure that all employees can interact comfortably and productively with people who have a disability. Employees who participate in disability awareness training programs can use the experiential exercises to break down fears and prejudices that people without disabilities have toward people with disabilities.

Review of Hypotheses

The research questions and null hypotheses posed for testing in this study are relisted below.

1. Will employees in the treatment group demonstrate a greater knowledge base in disability issues and legislation after attending a professionally designed workshop than employees in the control group?

Null Hypothesis #1: There is no statistically significant difference in the knowledge level about individuals with disabilities between theme park employees who receive the Disabilities Awareness Package (treatment) and those who do not receive the Disabilities Awareness Package (control).

2. Will employees change their attitude regarding persons with disabilities as a result of attending a workshop on individuals with disabilities and disability legislation?

Null Hypothesis #2: There is no statistically significant difference between the mean scores of the treatment and control groups in employee attitude toward persons with disabilities.

3. Will an employee training workshop on disability awareness issues and legislation change an employees' interactions with individuals with disabilities?

Null Hypothesis #3: There is no statistically significant difference between the mean scores of the treatment and control groups on employees' interaction with theme park guests who are disabled.

Review of Methods

For the purpose of this study, a pretest-posttest format was used to assess the levels of knowledge, attitude, and interaction with persons with disabilities. The measuring instruments were the Facts About Disability (FAD) Scale (Gething & Wheeler, 1992), the Interaction with Disabled Persons (IDP) Scale (Gething, 1991), and the Observations of Employees based on the Gouvier, Coon, Todd, and Fuller Scale (1994).

The Disability Awareness Workshop was based on the Disability Awareness Package (DAP). Section I of the DAP consisted of information regarding general issues about disability that are then expanded in Section II. Themes in Section I included: an explanation of the distinction among impairment, disability, and handicap; origins of attitudes and their effects on the quality of life and opportunities, strategies for people with and without a disability for appropriate behaviors during interactions; common myths and their realities; and issues associated with community access and service provision. Section II covered the following topical areas: learning disabilities, mental retardation, severe and/or multiple disabilities, physical and special health problems, visual impairments, Down Syndrome, emotional disturbance, Cerebral Palsy, speech and language disorders, autism and pervasive developmental disorder, epilepsy, and attention deficit disorder.

A flyer was mailed to each department at Busch Gardens, Tampa Bay announcing the Disability Awareness Workshop. Forty-five employees responded stating that they wanted to attend the one day workshop. From the 45 employees, the final sample of 40 employees was selected. Five employees were turned away because they did not have direct contact with guests in the theme park. The 40 employees were then randomly assigned into treatment and control groups. Employees in each group were randomly assigned to one of two scheduled pretest settings. Gender and department were a consideration when assigning subjects to a treatment or control group.

Employees in the treatment group attended a one day Disability Awareness Workshop. The independent variable was the Disability Awareness Workshop which included role play activities within Busch Gardens. Other variables that were examined included: age, gender, and department.

Review of the Experimental Questions

Findings indicated that the Disability Awareness Workshop did have an impact upon the increased knowledge pertinent to disability issues. Employees in the treatment group had an increase in posttest scores whereas employees in the control group had a decrease in posttest score. The increase in the posttest score for the treatment group sustains the positive impact of the Disability Awareness Workshop. Since there was a significant difference identified by the mean posttest knowledge score of employees, the null hypothesis pertinent to the primary research question #1 was rejected.

Posttest scores for employees on the IDP in both treatment and control groups decreased. The decrease in score indicates a more positive attitude toward individuals with disabilities by the employee. Since there was a significant difference identified by the mean posttest attitude score of employees, the null hypothesis pertinent to primary research question #2 was rejected with treatment subjects having a more positive attitude.

In analyzing the results associated with primary research question #3, employee interactions with individuals with disabilities, there was a statistical significance based on whether the employees interacted with an individual with a disability or with an individual without a disability. Each employee was observed by a guest with and without a disability. Information was recorded, transcribed, and analyzed. The results of these interviews resulted in a statistical significant difference in the number of interrogatives used; therefore, the null hypothesis for this research question was also rejected.

Discussion and Implications

This section is divided into three subsections: interpretation and discussion of results, and literature support, discussion of the problems and limitations, and discussion of practical limitations.

Interpretation and Discussion of Results for Research Question #1

There was a significant difference identified between the mean posttest scores of employees based upon whether they received the Disability Awareness Workshop (treatment) or not (control). Thus the null hypothesis was rejected. It can be concluded that the Disability Awareness Workshop had a greater impact on enhancing the knowledge of employees regarding theme park guests with disabilities. There are several explanations as to why this may have occurred.

As one employee put it, " Alot of the situations I did not know about or how to respond. Now I do." This employee also had a brother who is schizophrenic and a father who is quadriplegic. The employees had no formal training on disability awareness other than a ten minute presentation of the ADA during their initial employment training. Depending upon how long the employee had worked for Busch Gardens that training could have taken place anywhere from 1 day to 27 years ago (the longest time an employee had been employed by Busch Gardens). Another employee had mentioned that he had no formal training on people with disabilities.

According to the tenets of Adult Learning Theory, the most effective method of adult learning is a workshop with technology and simulations. The workshop should also stress practical volume and contain guided- and self-directed learning material. The best methods of adult learning include face-to-face interaction and the most significant learning occurs when adult students and their instructors discuss the learning process, its goals, objectives and outcomes, and participate together in carrying out these goals and objectives. The employees in this study were involved in all of the above. The adult learning theory hypothesizes that when adults can see the practical implications of learning they will become active learners. This is what appeared to have happened with the employees at Busch Gardens. They were able to relate what they had learned in the Disability Awareness Workshop to their job.

Interpretation and Discussion of Results for Research Question #2

There was a significant difference identified between the mean posttest scores of employees based upon whether they received the Disability Awareness Workshop (treatment) or not (control). Thus the null hypothesis was rejected. It can be concluded that the Disability Awareness Workshop enhanced the attitude of employees regarding theme park guests with disabilities. There are several explanations as to why this may have occurred.

Again following the tenets of the Adult Learning Theory, the employees were able to see the practical applications of the Disability Awareness Workshop. Current legislation, such as the Individuals with Disabilities Education Act, states that individuals with disabilities should be integrated into social and recreational areas. Disability awareness training seems to be the wave of the future. Individuals with disabilities want to be integrated into all aspects of society and be treated the same as individuals without disabilities. An employee who received the Disability Awareness Workshop stated, "I never knew how to treat a person with a disability so I ignored them and let someone else deal with them. Now I understand about the myths and realities of disabilities and I am not afraid to approach that person." Another employee said, "In many situations I did not know how to react to people with disabilities. Now I do." By helping the employees understand the myths and realities as well as stereotypes related to people with disabilities they were able to better see why they acted the way they did. This workshop seemed to help employees become more aware of stereotypes.

Employees with no previous knowledge about individuals with disabilities may have become more aware of their own attitude toward individuals with disabilities as a result of attending the Disability Awareness Workshop. Thus, employees may have changed their comfort level toward individuals with disabilities as a result of the section of the workshop entitled Attitudes and their Consequences. Some of the employee comments regarding this issue included, "I know I will now feel more comfortable around people with disabilities. I now understand their needs." And, "I feel I am more aware of 'people' and how to treat them than I was this morning." All of these comments confirm the importance of relating the information received at a workshop to practical levels that employees can relate back to their job.

Each employee who participated in this study comes into contact with thousands of guests daily. Increasing the employees' knowledge of people by helping them to understand the strengths and weaknesses of all types of people may have helped to change their attitude. Employees were able to see how misconceptions of a disability may have a direct effect on their attitude. Once these misconceptions were addressed, an identification process may have occurred and a change process may have begun.

Interpretation and Discussion of Results for Research Question #3

There was a significant difference identified between the mean posttest scores of employees based upon whether they received the Disability Awareness Workshop (treatment) or not (control). Thus the null hypothesis was rejected. It can be concluded that the Disability Awareness Workshop had a greater impact on enhancing the interaction pattern of employees toward theme park guests with disabilities. Employees attending the Disability Awareness workshop were taught to treat all guests, those with and without a disability, the same and to ask questions to check for understanding when communicating with a guest. Therefore, the only component of interaction that a change was expected to be found was on the number of interrogatives used when talking with a guest. There are several explanations as to why this may have occurred.

Two sections of the Disability Awareness Workshop included Barriers to Communication and Common Courtesies When Addressing a Person with a Disability. Again, without any prior knowledge or information on how to interact with a person with a disability, the employees did not know how to interact with a guest with a disability. Therefore, according to the employees, many employees ignored the guests. This was clear when an employee in Guest Relations stated, “Working in Guest Relations, I see upset people with disabilities all the time about how an employee treated them or did not treat them, so more people need to be informed.” This employee saw the importance of understanding the needs of people with disabilities and how to talk with them. Another employee said, “The informative workshop has definitely increased my awareness about disabilities and what to expect when I interact with them.”

It is good business for corporations to have satisfied customers. Satisfied customers mean increased profits for the company by one of the best methods of advertising, word of mouth. Employees who are dedicated to their job seek ways to increase company profits which could increase their salary. By understanding the diversity of people and respecting this diversity successful integration may occur.

Discussion of Problems and Limitations

There were problems and limitations that were encountered in the process of implementing this study that should be considered when interpreting these data. One such problem is the voluntary nature of the study. A flyer was sent to all departments, yet a small number of employees from each department responded. One reason for the small number of employees could be that not all employees in the department were made aware of the Disability Awareness Workshop. This was evident by the number of employees who approached the researcher after the workshop and asked when it would be offered again. Each employee who approached the researcher was unaware of the availability of the original Disability Awareness Workshop.

A limitation of when the workshop was offered may have impacted the results. The Disability Awareness Workshop was only offered on one day. If employees were given the choice of attending different sessions of the Disability Awareness Workshop a greater number of employees may have participated in the study. Although participating employees received paid work release to attend the workshop, several employees came in on their day off to attend the workshop. If all employees were made aware that if they attended the workshop on their day off they would receive their regular salary may also have impacted the results of this study.

There is some controversy regarding the effectiveness of a "one-shot" workshop or inservice in enhancing employee knowledge, attitude, and interaction related to individuals with disabilities. The methodology utilized in the current study was a one-time intervention between the pretest and posttest assessments. The business industry favors one-shot workshops or interventions due to the high cost related to the employees attending the workshop. There was no ongoing delivery of information or contact with subjects, other than the workshop and testing sessions. The section on future research will address this concern.

Suggestions for Further Research

The finding that the Disability Awareness Workshop was effective in increasing employee knowledge, improving employee attitude, and changing employee interactions towards individuals with disabilities. This study demonstrated the necessity of a disability awareness workshop as a method of educating employees on disability awareness issues.

It would be interesting to investigate the long-term impact of the Disability Awareness Workshop on the employees using a longitudinal or follow-up study. The components of the adult learning theory that were included in this workshop claim that long-term learning is enhanced. Only a follow-up study can accurately address the issue of retention and long-term learning.

To address the limitation associated with one-shot intervention programs, it would be beneficial to use the Disability Awareness Workshop on an ongoing basis and assess the effectiveness over a longer period of time. Due to the high turnover of employees, perhaps the Disability Awareness Workshop could be offered monthly or bimonthly. Posttest data could be collected at the conclusion of each quarter to identify if there is any difference between repeated interventions of the workshop and the one-time intervention that was used in this study.

The cost-effectiveness of any type of training program is an important consideration for business. In the business or private industry setting, one determinant of whether a particular workshop is cost-effective is based on the benefit that the workshop or as many individuals as possible and will the overall result of this workshop mean a greater monetary return for that business. It costs businesses money to have employees partake in a workshop or training. There were a high number of employees who still wanted to take this workshop, and they were willing to attend it on their day off without any salary compensation. Perhaps, if the workshop were offered as part of the orientation to employment, businesses could reach all new employees and receive the monetary benefits without any additional costs. Current employees would have the option of attending any scheduled workshop on a voluntary basis.

To further examine the workshop and its effects on employee interaction with individuals with disabilities it may be helpful to use individuals with varying disabilities. This researcher used a man with paraplegia to conduct the observations. Although this man was very intelligent and carried on conversations with the employees, it may be interesting to have a person with mental retardation, Cerebral Palsy, or deafness approach the employee. It would be interesting to determine if the type of disability an individual may have will have an impact on the way the employee interacts with that particular employee.

All employees would benefit from attending a disability awareness workshop of some fashion. Employees who attended the Disability Awareness Workshop stated the need for all employees to attend the workshop. The employees stated

- “It would be helpful if the workshop was offered to at least a couple of reps from every department within the park.”
- “It (the workshop) needs to be offered to more employees.”
- “I believe all employees should come to this class. Being in the people business, this general knowledge comes in handy.”
- “I suggest you come again. Only a handful of people (employees) were able to come. There are still too many of us left in the dark. I have seen it.”

These were just a few of the comments received regarding the need to have more employees attend this workshop. There is clearly a need for greater employee awareness when dealing with the public including individuals with disabilities, especially when the business is in clearly in the public eye and their profits come from public satisfaction.

It is good business for corporations to have satisfied customers. Satisfied customers mean increased profits for the company by one of the best methods of advertising, word of mouth. Employees who are dedicated to their jobs seek ways to increase company profits which in turn may increase their salary. By understanding the diversity of people and respecting this diversity successful integration may occur.

Customer satisfaction is key to any successful business (Milillo, 1995). Without effective customer relations, all the money that has been invested in marketing and advertising is lost. Them park employees go through training that will instill in them the idea that they are key players in the workplace environment, and visitors come back year after year to experience that environment again. This is evident by the billions of dollars theme parks make each year. Good service is essential to a company's success and good management is the key to providing good service. Employees should be motivated to give god service by a sense of togetherness that stems from a company's effective communication network. A caring environment is fostered for both employees and customers; customer's needs should be continually identified and accommodated. Good training for all employees is essential in developing the strong corporate culture needed for success.

Soloman (1989) indicated that one reason for theme parks high revenues is its emphasis on customer service and a focus on the elements of efficiency, courtesy, show and safety. The Disability Awareness Workshop helps to enhance all of the characteristics Soloman listed.

Summary

Individuals learn at different rates and benefit from an array of instructional methods. According to adult learning theory, when adults have clear objectives and can relate the material back to their work they will be more attentive and willing to attend workshops and find a purpose in their learning. When adults (employees) have goals and objectives and a way to relate the information back to their particular job will be more consciences of the material, thus willing to learn more. The results of this study substantiate the interest in the topic and the growth of employee knowledge regarding individuals with disabilities and disability issues. The high degree of satisfaction reported by study participants substantiates its need in the workforce.

Employee training should cover a variety of topics when educating employees on company policy. When a company is clearly in the people business and their profits come from customer satisfaction it would make sense that employers would want all their employees to be aware of all types of people and how to interact positively with all types of people under a variety of situations. As two employees put it "In my business, this kind of information can always be relevant." and "Many persons need to be aware of these things. Too many people don't know how to cope with disabilities and ignore the person." Ongoing development, implementation, and evaluation of the employees' retention of information related to individuals with disabilities and disability issues is important in facilitating a family oriented theme park climate that welcomes all types of people.

APPENDIX
DISABILITY AWARENESS WORKSHOP

Part 1--General Information
    Background Information
    Definition of terms
        - disability
        - handicapped
        - impairment
        - normality
        Types of disabling conditions
        Causes of disabling conditions
    Historical Context & Legislation
    Service Issues for People with Disabilities
        Barriers to communication
        Strategies for service providers
    Impact on the Individual, Family, and Community
    Common Myths and Their Reality
    Attitudes and Their Consequences
    Appropriate Language and Behavior
        Rights and Responsibilities of the Service Providers
        Rights and Responsibilities of the Person with a Disability

Part 2--Specific Disability Areas
    Intellectual Disability
        introduction
        implications for everyday living
        attitudes of others
        attitudes of people with intellectual disabilities
        rights and responsibilities for people with intellectual disabilities
        strategies for successful interactions
    Epilepsy
        introduction
        implications for everyday living
        attitudes of others
        attitudes of people with Epilepsy
        rights and responsibilities for people with Epilepsy
        strategies for successful interactions
    Vision Impairment & Blindness
        introduction

- implications for everyday living
- attitudes of others
- attitudes of people with vision impairment and blindness
- rights and responsibilities for people with vision impairment and blindness
- strategies for successful interactions

Hearing Impairment & Deafness
- introduction
- implications for everyday living
- attitudes of others
- attitudes of people with hearing impairment and deafness
- rights and responsibilities for people with hearing impairment and deafness
- strategies for successful interactions

Mental Illness & Psychiatric Disability
- introduction
- implications for everyday living
- attitudes of others
- attitudes of people with mental illness & psychiatric disabilities
- rights and responsibilities for people with mental illness & psychiatric disabilities
- strategies for successful interactions

Dementia
- introduction
- implications for everyday living
- attitudes of others
- attitudes of people with dementia
- rights and responsibilities for people with dementia
- strategies for successful interactions

Multiple Sclerosis
- introduction
- implications for everyday living
- attitudes of others
- attitudes of people with multiple sclerosis
- rights and responsibilities for people with multiple sclerosis
- strategies for successful interactions

Paraplegia & Quadriplegia
- introduction
- implications for everyday living
- attitudes of others
- attitudes of people with paraplegia & quadriplegia
- rights and responsibilities for people with paraplegia & quadriplegia
- strategies for successful interactions

Acquired Brain Injury
- introduction
- implications for everyday living
- attitudes of others
- attitudes of people with acquired brain injury

  - rights and responsibilities for people with acquired brain injury
  - strategies for successful interactions
- Cerebral Palsy
  - introduction
  - implications for everyday living
  - attitudes of others
  - attitudes of people with Cerebral Palsy
  - rights and responsibilities for people with Cerebral Palsy
  - strategies for successful interactions

REFERENCES

Allen, R. L. (1992) Learning the ground rules at Disney "U." *Nation's Restaurant News, 26*(47), 102-103.

Anthony, W. A. (1972). Societal rehabilitation: Changing society's attitudes toward the physically and mentally disabled. *Rehabilitation Psychology, 19*, 319-342.

Antonak, R. F. (1994). Development and psychometric analysis of an indirect measure of atitudes toward individuals with mental retardation using error-choice method. *Mental Retardation, 32*(5), 347-355.

Antonak, R. F., & Livneh, H. (1988). *The measurement of attitudes toward people with disabilities: Methods, psychometrics, and scales.* Springfield, IL: Thomas.

Australian Bureau of Statistics. (1989). *Disabled and aged persons.* Canberra: Australian Government Publishing Service.

Baumgart D., & Askvig, B. (1992). Job-related social skills interventions: Suggestions from managers and employees. *Education & Training in Mental Retardation, 27*(4), 345-353.

Bedini, L. (1993). Transition and integration in leisure for people with disabilities. *Parks and Recreation, 28*(11), 20-24.

Bergin, D. A. (1992). Leisure activity, motivation, and academic achievement in high school students. *Journal of Leisure Research, 24*(3), 225-239.

Berniker, M. (1995). Disney, ABC to combine resources for interactive markets. *Broadcasting & Cable, 125*(32), 36-38.

Biklen, D., Corrigan, C., & Quick, D. (1989) Beyond obgliation: Students' reaction to each other in integrated classes. In D. K. Lipsky & A. Gartner (Eds.), *Beyond separate education: Quality education for all* (pp. 207-221). Baltimore: MD: Paul H. Brookes.

Blocklyn, P. L. (1988) Making magic: The Disney approach to people management. *Personnel, 65*(12), 28-34).

Boud, D. (1986). Facilitating Learning in Continuning Education: Some Important Sources. *Studies in Higher Education, 11*(1), 237-243.

Caldwell, L. (1993). Research on adolescents and leisure activities. *Parks and Recreation, 30*(3), 19-25.

Check, J. F. (1984). Teaching learning preferences of the adult learner. *Education, 105*(1), 107-112.

Christman, L. A., & Slaten, B. L. (1991) Attitudes toward people with disabilities and judgements of employment potential. *Perceptual and Motor Skills, 72*, 467-475.

Coye, R. W., & Belohlav, J. A. (1995). An exploratory analysis of employee participation. *Group and Organization Management, 20*(1), 4-18.

Cranton, P. (1992). *Planning instruction for adult learners.* Toronto: Wall and Thompson.

Daloz, L. A. (1986). *Effective teaching and mentoring*. San Francisco, CA: Jossey-Bass.

Dattilo, J., & Jekubovich-Fenton, N. (1995). Leisure service TRENDS for people with mental retardation. *Parks and Recreation, 30*(5). 46-52.

Davis, L. N., & McCullen, E. (1990). *Planning, conducting, and evaluating workshops*. Austin, TX: Learning Concepts.

Dickinson, G. (1973). *Teaching adults: A handbook for instructors.* Toronto: New Press.

Donaldson, J. (1980) Changing attitudes toward handicapped persons:A review and analysis of literature. *Education and Training of the Mentally Retarded, 16*, 342-349.

Donaldson, R. (1990). Consultation and collaboration: A decision making model. *Teaching Exceptional Children*, *22*(2), 22-25.

Donaldson, R. M., Helmstetter, E., Donaldson, J., & West, R. (1994). Influencing high school students' attitudes toward and interactions with peers with disabilities. *Social Education, 58*(4), 233-237.

Eichinger, J., Rizzo, T., & Sirotnik, B. (1991). Changing attitudes toward people with disabilities. *Teacher Education and Special Education, 14*(2), 121-126.

Elder, J. K. (1988). Transition from school to work: Changing attitudes and opportunities. *Exceptional Parent*, *18*(1) 27-29.

Even, M. J. (1988). Baggage barriers: Techniques. *Lifelong Learning. 11*(4). 29-30.

Fabian, E. S., Lueking, R. G., & Tilson, G. P. (1994). *A working relationship: The job development specialist's guide to successful partnerships with business.* Baltimore, MD: Paul H. Brookes.

Fichten.C. S., & Amsel, R. (1988). Thoughts concerning interaction between college students who have a physical disability and their nondisabled peers. *Rehabilitation Counseling Bulletin, 32*, 22-40.

Fichten, C. S., Amsel, R., Bourdon, C. V., & Creti, L. (1987). Interaction between college students with physical disabilities and their professors. *Journal of Applied Rehabilitation Counseling, 19*(1), 13-20.

Fichten, C. S., Robillard, K., Judd, D., & Amsel, R. (1989). College students with physcial disabilities: Myths and realities. *Rehabilitation Psychology, 34*(4), 243-257.

Fichten, C. S., Robillard, K., Tagalakis, V., & Amsel, R. (1991). Casual interaction between college students with various disabilities and their nondisabled peers: The internal dialogue. *Rehabilitation Psychology, 36*(1), 3-20

Fiedler, C. R., & Simpson, R. L. (1987). Modifying the attitudes of nonhandicapped high school students toward handicapped peers. *Exceptional Children, 53*, 342-349.

Freeman, W. H. (1991, April 7). *Mickey Mouse goes to Jurassic Park: The challenge of technology for leisure.* Paper presented at the annual meeting of the American Alliance for Health, Physical Education, Recreation, and Dance, San Francisco, CA.

Galambos, L. (1994). The ADA: Getting beyond the door. *Parks and Recreation, 29*(4), 66-71.

Garske, G. G., & Thomas, K. R. (1990). The relationship of self-esteem and contact to attitudes of students in rehabilitation counseling toward persons with disabilities. *Rehabilitation Counseling Bulletin, 34*(1), 67-71.

Gething, L. (1991). *Interaction with Disabled Persons Scale.* Sydney: University of Sydney.

Gething, L. (1992). Generality vs. specificity of attitudes towards people with disabilities. *British Journal of Medical Psychology, 64*(1) 55-64.

Gething, L. (1994). The disability awareness package for training rehabilitation and service delivery professionals. *Rehabilitation Education, 7*, 241-251.

Gething. L., & Wheeler, B.W. (1992). The Interaction with Disabled Persons Scale: A new Australian instrument to measure attitudes towards people with disabilities. *Australian Journal of Psychology, 44*, 75-82.

Gouvier, W. D., Coon, R. C., Todd, M. E., & Fuller, K. H. (1994). Verbal interactions with individuals presenting with and without physical disability. *Rehabilitation Psychology, 39*(4), 263-268.

Grenot-Scheyher, M. (1994). The nature of interactions between students with severe disabilities and their friends and acquaintances without disabilities. *Journal of the Association for Persons with Severe Handicaps, 19*(4), 253-262.

Haddle, H. W. (1974). The modification of attitudes toward disabled persons: The case for using systematic desensitization as an attitude change strategy. *American Foundation for the Blind Research Bulletin, 28*, 98-110.

Hallenbeck, M. J., & McMaster, D. (1991). Disability simulations for regular education students. *Teaching Exceptional Children, 23*(3), 12-15.

Hayes, E. (1989). Adult education: Context and challenge for distance educators. *American Journal of Distance Education, 4*(1), 25-38.

Hemstetter, E., Peck, C. A., & Giangreco, M. F. (1994). Outcomes of inteactions with peers with moderate or severe disabilities: A statewide survey of high school students. *Journal of the Association for Persons with Severe Handicaps, 19*(4), 263-276.

Higgins, J. M. (1995) Storyboard your way to success. *Training and Development, 49*(6), 13-18.

Hultsman, W. Z. (1992) Constraints to activity participation in early adolescence. *Journal of Early Adolescence, 12*(3), 280-299.

Hultsman, W. Z. (1995). Recognizing patterns of leisure constraints: An extension of the exploration of dimensionality. *Journal of Leisure Research, 27*(3), 228-244.

Kauffman, J. D., & Hallahan, D. P. (1981). *Handbook on special education.* Englewood Cliffs, NJ: Prentice Hall.

Kidd, J. R. (1973). *How adults learn.* New York: Association Press.

Killion, A. M. (1994). A trainer with disabilities. *Training and Development, 48*, 65-66.

King, A. (1989). Verbal interaction and problem solving within computer assisted cooperative learning groups. *Journal of Educational Computing Research, 5*(1), 15.

Knowles, M. S. (1990). *The adult learner: A neglected species.* Houston, TX: Gulf Publishing.

Kuh, D., Lawrence, C., Tripp, J., & Creber, G. (1988). Work and work alternatives for disabled young people. *Disability, Handicap, & Society, 3*(1), 3-26.

Laabs, J. J. (1992). Disney helps keep kids in school. *Personnel Journal, 71*(11), 58-65.

Lakewood Research. (1993). Industry report. *Training, 30*(10), 29-31.

Levy, J. M., Jessop, D. J., Rimmerman, A., & Levy, P. H. (1992). Attitudes of Fortune 500 corporate executives toward the employability of persons with severe disabilities: A national study. *Mental Retardation, 30*(2) 67-75.

Linveh, H., & Antonak, R. F. (1990). Reactions to disability: An empirical investgation of their nature and structure. *Journal of Applied Rehabilitation Counseling, 21*(4) 13-21.

Makas, E. (1988). Positive attitudes towards disabled people: Disabled and nondisabled persons' perspective. *Journal of Social Issues, 44*(1), 49-61.

Makas, E., Finnerty-Fried, P., Sigafoos, A., & Reiss, D. (1987). The issues in disability scale: A new cognitive and affective measure of attitudes toward people with physical disabilities. *Journal of Applied Rehabilitation Counseling, 19*(1), 21-29.

Matthes, K. (1992). Awareness trainings: First-hand experience working with disabilities. *HR Focus, 69*(7), 19.

McCormick, S. (1991). The changing American family at play. *Parks and Recreation, 26*(7), 44-49.

McGarvey, R., & Smith, S. (1993). Etiquette 101. *Training, 30*(9), 51-55.

Mello, J. A. (1995) Employment law and workers with disabilities: Implication for public sector managers and human resource practices. *Public Personnel Management, 24*(1), 75-87.

Merriam, S. B., & Caffarella, R. S. (1991). *Learning into adulthood.* San Francisco, CA: Jossey-Bass.

Mezirow, J. (1981). A critical theory of adult learning and education. *Adult Education, 32*(1) 3-24.

Milillo, N. (1995). Are you selling the wrong product? *Progressive Grocer, 74*(12), 21.

Minskoff, E. H., Sautter, S. W., Hoffman, F. J., & Hawks, R. (1987). Employer attitudes toward hiring the learning disabled. *Journal of Learning Disabilities, 20*(1), 53-57.

Morgan, B., Holmes, G. E., & Bundy, C. E. (1976). *Methods in adult education,* Danville, IL: Interstate.

Murray, P. (1988). The study of the history of disabilities service: Examining the past to improve the present and the future. *Australian and New Zealand Journal of Developmental Disabilities, 14*(2), 93-102.

Murray-Seegert, C. (1989). *Nasty girls, thugs, and humans like us: Social relations between severely disabled and nondisabled students in high school.* Baltimore, MD: Paul H. Brookes.

Natale, J. A. (1995). Animating education. *American School Board Journal, 182*(4), 22-27.

O'Brien, T. (1992). IAAPA industry institute is more than lectures on management development. *Amusement Business, 104*(45), 60-61.

O'Brien, T. (1995a). Attendance climbs 7% at top North American parks. *Amusement Business, 197*(51), 3-8.

O'Brien, T. (1995b) Finally, Disney World announces plans for animal kingdom. An interview with Michael Eisner. *Amusement Business, 107*(26), 17.

Patterson, J. B. (1987). Disabling language: Fact or fiction? *Journal of Applied Rehabilitation Counseling, 19*(1), 30-32.

Peck, C. A., Donaldson, J., & Pezzoli, M. (1990). Some benefits nonhandicapped adolescents perceive for themselves from their social relationships with peers who have severe handicaps. *The Journal of the Association for Persons with Severe Handicaps, 15*, 241-249.

Popino, J. (1983). A case study in applying adult learning theory in developing managers. *Training and Development Journal, 37*(2), 73-78.

Powell, T. (1995) Amusement industry expo panel addresses the Americans with Disabilities Act. *Amusement Business, 107*(45), 60-62.

Reiger, B. J. (1995). Lessons in productivity and people. *Training and Development,49*(10), 56-59.

Roberts, K. (1995). The proof of HR is in the profits. *People Management, 1*(3), 42-44.

Rosenblum, S. H. (1985). *Involving adults in the education process*. San Francisco, CA: Jossey-Bass.

Rossing, B. E., & Long, H. B. 1981). Contributions of curiosity and relevance to adult learning motivation. *Adult Education, 32*(1)25-36.

Rothwell, W. J. (1990). HRD and the ADA. *Training and Development, 45*(8), 45-47.

Schaffer, A. R. (1994). Recycle Rex latest addition to Disney's environmental program. *Amusement Business, 106*(25), 29-31.

Schepis, M. M., & Reid, D. H. (1994). Training direct service staff in congregate settings to interact with people with severe disabilities: A quick, effective and acceptable program. *Behavioral Interventions, 9*(1), 13-26.

Schleien, S. J. (1993). Access and inclustion in community leisure services. *Parks and Recreation, 28*(4). 66-72.

Schmelkin, L. P., & Berkell, D. E. (1989). Educators' attitudes toward the employability of persons with severe handicaps. *Career Development for Exceptional Individuals, 12*(1), 41-47.

Sea World. (1994). *Curriculum guides*. Orlando: Sea World of Florida.

Shapiro, A., & Margolis, H. (1988). Changing negative peer attitudes toward students with learning disabilities. *Reading, Writing, and Learning Disabilities, 4*, 133-146.

Shavelson, R. J. (1988). *Statistical reasoning for the behavioral sciences*. Boston, MA: Allyn & Bacon.

Sheer, J., & Groce, N. (1988). Impairment as a human constant: Cross-cultural and historical perspectives on variation. *Journal of Social Issues, 44*(1)23-37.

Showers, B. (1990). Aiming for superior classroom instruction for all children: A comprehensive staff development model. *Remedial and Special Education, 11*(3), 35-39.

Silverthrone, S. (1995) Sleeping Beauty. *PC Week, 12*(23), A1-4.

Simpson, R. L. (1980). Modifying the attitudes of regular class students towards the handicapped. *Focus on Exceptional Children, 11*, 1-11

Solomon, C. M. (1989). How does Disney do it? *Personnel Journal, 68*(12), 58-58.

Stanley, T. L. (1995). How long can the ride continue? *Brandweek, 36*(34), 34-37.

Staub, D., & Hunt, P. (1993). The effects of social interaction training on high school peer tutors of schoolmates with severe disabilities. *Exceptional Children, 60*(1), 41-57.

Tesluk, P. E., Farr, J. L., Mathieu, J. E., & Vance, R. E. (1995). Generalization of employee involvement training to the job setting: Individual and situation effects. *Personnel Psychology, 48*(3), 607-633.

Tracy, S. J., & Schuttenberg, E. M. (1986). The desirable and the possible: Four instructional models. *College Teaching, 34*(4), 155-160.

United States Commission on Civil Rights. (1983). *Disability statistics.* Washington, DC: Government Printing Office.

Voeltz, L. M. (1981). A leisure activities curriculur component for severely handicapped youth: Why and how. *Viewpoints in Teaching and Learning, 57*(1), 82-93.

Warr, P., & Bunce, D. (1995). Trainee characteristics and the outcomes of open learning. *Personnel Psychology, 48*(2), 347-376.

Weinstein, J. (1993) Hands-on education at Disney. *Restaurants & Institutions, 103*(26), 75.

Wesson, C., & Mandell, C. (1989). Simulations promote understanding of handicapping conditions. *Teaching Exceptional Children, 22*(1), *32-35.*

Whittle, J. W. (1988). A five step approach to service excellence. *Bank Marketing, 20*(2), 8-10.

Winzer, M. A. (1986). Early developments in special education: Some aspects of enlightment thought. *Remedial and Special Education, 7*(5), 42-49.

Wyatt, C. (1993). Getting ahead in implementing ADA, *Bank Management, 69*(3), 50-56.

Yuker, H. E. (1988). *Attitudes toward persons with disabilities.* New York: Springer.

Yuker, H. E., Block, J. R., & Younng, J. H. (1966). *The measurement of attitudes toward disabled persons.* New York: Human Resources Center.

Yuker, H. E., & Hurley, M. K. (1987). Contact with and attitudes toward persons with disabilities: The measurement of intergroup contact. *Rehabilitation Psychology, 32*(3) 145-154.

BIOGRAPHICAL SKETCH

Elizabeth Louise Wikfors was born 22 June 1959 in Bethesda, Maryland. She was the second of six children born to Edwin and Elenor Wikfors. Other siblings include Rick, Robert, Lisa, Karyn, and Christine.

Liz graduated from high school in 1977 and attended Northern Virginia Community College for a year. In 1978, Liz transferred to George Mason University in Fairfax, Virginia, where she studied early childhood general education. In 1980, she graduated with a Bachelor of Science degree in education with an emphasis in NK-3 and certification in 4-8. Other certifications Liz received included English, math, and social sciences. After teaching general education for 10 years Liz returned to college to pursue a graduate degree. In 1990 Liz entered the College of William and Mary, subsequently graduating in 1991 with a master's degree in education with emphasis in special education, resource consultation teaching, and learning disabilities.

Liz was a teacher in the Manassas City Public Schools for 13 years. Liz taught first grade for two years and then taught a transition kindergarten-first grade for two years. She transferred to upper grade levels and taught all the fifth grade students with behavior problems and learning disabilities along with general education students for six years. After receiving her master's degree, Liz returned to Manassas to oversee and implement the Collaborative Consultation program at Grace E. Metz Junior High School. She also served as a resource consultation specialist and teach learning strategies to seventh grade students with learning disabilities. The next school year, Liz moved with her students to eighth grade where she continued to oversee the program, supervise four special education teachers, work with twenty-one general education teachers, and teach learning strategies to eighth and ninth grade students with learning disabilities.

Apart from Liz's responsibilities with Manassas City Public School System, she taught graduate classes at George Mason University's Center for Health Promotion since 1988. The courses focused on drug and alcohol prevention in the schools: TRIAD and facilitated courses in Health Aspects of Addiction, Children of Alcoholics and Related Family Issues, and Nutritional Aspects of Addiction.

Liz’s enjoyment of continuing education facilitated her enrollment in the Ph.D. program at the University of Florida. Liz’s interest in special education and transition were of special interest to Dr. Stuart Schwartz, professor in the Department of Special Education. After an initial interview, Dr. Schwartz offered Liz an opportunity to pursue her dream of receiving her doctorate. In the fall of 1993, Liz enrolled in the 3+ year doctoral program.

In 1994, while Liz was attending the Family Church in Gainesville, Florida and working toward completing a Ph.D., she met Richard Lee Hall. He was a great source of encouragement and support to her while she was completing her dissertation. Two years later, in 1996, they were married.

Education has always been important to Liz. She has enjoyed teaching, helping others to learn, and contributing to the education of others by helping them enjoy learning in and out of the structured school setting.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Stuart E Schwartz

Stuart E. Schwartz, Chair
Professor of Special Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Hazel A. Jones

Hazel A. Jones
Assistant Professor of Special Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Cecil D. Mercer

Cecil D. Mercer
Professor of Special Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

M. David Miller

M. David Miller
Professor of Foundations of Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Jeanne B Repetto
Jeanne B. Repetto
Assistant Professor of Special Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Kristine W. Webb
Kristine W. Webb
Assistant Scholar of Special Education

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December 1996

Roderick J McDavis
Dean, College of Education

Dean, Graduate School